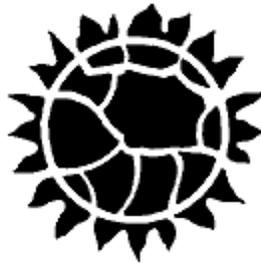


MEGATRAVELLER™

C O N S O L I D A T E D E R R A T A

Errata and Addenda Collection
in the Shattered Imperium



V2.21 (02/23/13)
Edited by Donald E. McKinney

F A R F U T U R E E N T E R P R I S E S

MEGATRAVELLER CONSOLIDATED ERRATA

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INTRODUCTION

I'm a believer; I believe that **MegaTraveller** had the best potential of any **Traveller** rule set ever released. What became the millstone around its neck were the expansive errata required to make sense of the rules. Since I still like and use these rules, I have consolidated this errata from several documents:

- MegaTraveller Errata, dated 4/1/1988;
- MegaTraveller Errata, dated 10/1/1988;
- MegaTraveller Errata and Clarifications, dated 09/01/1990
- Consolidated MegaTraveller Errata, dated 04/01/1993
- Material printed in issues of *Challenge* (#36, #43), *Travellers' Digest*, and *the MegaTraveller Journal*.
- Enhancements to the Trade and Commerce rules in **Knightfall**.
- Rebuilt vehicle designs from **Imperial Encyclopedia** presented in DGP's *101 Vehicles*.

In addition, I have applied some formatting in places to make the document cleaner. If you've got additions, contact me at don.mckinney@gmail.com. This is a LIVING version of this document—my intention is to continue to add to it, making it available for other **MegaTraveller** players and referees.

This errata provides corrections and elaborations for the entire GDW **MegaTraveller** rules line. Currently included errata covers: **Players' Manual** (0211), **Referee's Manual** (0212), **Imperial Encyclopedia** (0213), **Rebellion Sourcebook** (0214), **Referee's Companion** (0215) **COACC** (0216), **Knightfall** (0219), and **Hard Times** (0221). As I find errata for *Assignment Vigilante* (0223), *Astrogator's Guide to Diaspora Sector* (0224), and *Arrival Vengeance* (0225), I will add them to this collection. I am not considering individual errata for *Fighting Ships of the Shattered Imperium* (0218), as most of the designs presented in that book must be rewritten. The three missing product numbers, *Flashback* (0217), *On the Edge* (0220), and *Rebel's Tales* (0222) were never published by GDW.

As of v2.15, I have permission from Roger Sanger (the copyright owner) to support DGP's **MegaTraveller** product line. This errata provides corrections for **The Early Adventures** (864), **101 Vehicles** (871), **Starship Operator's Manual Vol. 1** (872), **World Builders' Handbook** (875), **Vilani and Vargr** (878) and **Solomani and Aslan** (881). I am looking for errata for *Referee's Gaming Kit* (876), and *The Flaming Eye* (880). Among the missing product numbers that DGP never released were *Grand Explorations* (873), *The Black Duke* (874), *Robots and Cyborgs* (877), and *Manhunt* (879).

UPDATES

The latest changes to this document are always marked in **blue** for easy identification.

This section details updates to this document.

- v2.21, 02/23/13: **new cover, additional miscellaneous fixes.**
- v2.20, 09/01/11: numerous miscellaneous fixes.
- v2.19, 09/15/10: *One Small Step* review, CoTI cleanup.
- v2.18, 03/25/10: review of rule elements from **CT** not incorporated into **MegaTraveller, COACC** review.
- v2.17, 08/18/09: general review of various errata and cleanup from CoTI, plus **CT** errata.
- v2.16, 03/05/09: errata cleanup from comparisons of **MegaTraveller** printing revisions.
- v2.15, 01/01/09: incorporated errata for DGP **MegaTraveller** products.
- v2.14, 03/05/08: point defense rules cleanup, extended Merchant character skills revision.
- v2.13, 12/31/07: psionic tasks cleaned up, firing at structures and breaches, formatting changes.
- v2.12, 06/11/07: antimatter missiles, modular cutters for the broadsword, mostly housekeeping.
- v2.11, 04/13/07: review of character generation and more cleanup.
- v2.10, 03/01/07: some cleanup of existing errata from CoTI discussions.
- v2.09, 02/13/07: more errata from CoTI discussions, plus additional **Imperial Encyclopedia** and **Rebellion Sourcebook** errata.
- v2.08, 02/02/07: added errata and additions from CoTI discussions and TML archives, including stellar generation and mass drivers.
- v2.07, 01/09/07: incorporated additional CoTI discussion errata, added UPDATES and PROBLEMS and ADDENDA sections.
- v2.06, 10/17/06: added rebuilt vehicle designs from *101 Vehicles* to **Imperial Encyclopedia** errata.
- v2.05, 09/23/06: reviewed 1990 errata sheets for missing data.
- v2.04, 09/16/06: added clarifications from *Referee's Gaming Kit* and other research.
- v2.03, 08/22/06: incorporated material from CoTI discussions and research.
- v2.02, 08/12/06: added errata from *Challenge #68's* "Mercenary Supermart" article.
- v2.01, 08/04/06: added Trade and Commerce errata from **Knightfall**.
- v2.00, 07/21/06: original posting of the *MegaTraveller Consolidated Errata* document.

EXPLANATIONS

The errata are broken down into four categories: corrections, omissions, clarifications, or additions.

Correction: Could be a typo, could conflict with another rule or publication, but the original item is wrong.

Omission: Perhaps it was an editing problem, but something was just left out of the published material.

Clarification: This is an explanation of something that was difficult to understand, or has confused many players or referees.

Addition: Not in the original material, but it really helps if you use it with the existing material.

EXPANSIONS

In addition to the errata presented here, the **MegaTraveller** referee might find other sources useful for specific rules questions:

- Replacement body parts, prosthetics and bionics (*Travellers' Digest #12, #13 and #14*).
- MegaTraveller Starship Design Example (*Travellers' Digest #13*) [*steps great, example broken*].
- Children in MegaTraveller (*Travellers' Digest #15*).
- Nuclear Radiation (*Travellers' Digest #15*).
- Mental Illness (*Travellers' Digest #17*).
- Diseases and their Treatment (*Travellers' Digest #20*).
- Suspended Animation (*Travellers' Digest #21*).
- Custom Ship Add-ons (*MegaTraveller Journal #4*).
- Grapnel Guns (*Challenge #38*).
- One Small Step, rules for pre-gravitic spaceflight (*Challenge #45 and #47/Hard Times*).
- Special Psionics (*Challenge #47*).
- When it's Lances, Not Lasers, pre-gunpowder combat (*Challenge #49*).
- Wet Navy (*Challenge #53, #54 and #60*).
- Wind & Wood, Steel & Steam, early tech design (*Challenge #61*).
- Missing Links/Personal Weapons, slugthrowers (*Challenge #64 and #66*).
- Advanced Lasers (*Challenge #66*).
- Astrogator's Update to Diaspora Sector (*Traveller Chronicle #2, #3, #4 and #5*).
- Hunting Animals (*Travellers' Digest #10*).

ADDENDA

This section notes additional material which addresses problems without moving away from the original rule construction as presented in *MegaTraveller*.

- Reconciling *Book 8, Robots* with the vehicle construction rules in the *Referee's Manual* has been resolved by Jonathan Sherlock's *MegaTraveller Robots* project:
http://rpg.drivethrustuff.com/product_info.php?products_id=94849&filters=0_0_0&manufacturers_id=4.
- Added a set of rules for modifying the results during Stellar Generation to produce something more realistic, based on changes from Mark "Geo" Galinas' *Challenge #77* article on modifying worlds for TNE, as well as the rules Harold Hale proposed for the star data ultimately used for *Regency Sourcebook* (TNE).

PROBLEMS

There are certain issues with the **MegaTraveller** rules as presented for which no obvious errata exists. At some point, it is hoped that the MT community might agree on "addenda" to cover these issues. For now, they are listed here as known problems...

- Should aircraft damage points NOT be multiplied by 10 like other vehicles?
- How long do the effects of Trader skill apply? (RM 54)
- Prospecting buggy design missing (carried by Seeker) (IE 81)
- High Velocity Guns need to expand to allow naval guns (RM 77)
- Pirate characters receiving a "letter of marque" in mustering out are supposed to receive a positive DM for receiving a corsair? (PM 19)
- Tac missiles in MT? MTJ #3's tac missiles are not the answer...
- Existing disintegrator errata makes weapon weaker than particle accelerators

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GAME DESIGNERS' WORKSHOP ERRATA

PLAYERS' MANUAL (0211, 1987)

The following corrections should be noted for the **Players' Manual**.

Inside Front Cover, Spinward Marches Map (clarification): The Spinward Marches map on the inside front cover of the Players' Manual is the victim of an unfortunate circumstance of printing... they shot the B&W plate from the color map and all the worlds have some color in them, which, alas, only shows up as black on a B&W map.

Page 9, right column, Universal Task Profile Format (correction): The sample task is incorrect. The correct task should be:

To diagnose damage done to an air/raft:
Routine, Gravitics, Grav Vehicle, 15 min (uncertain).

Page 13, World Profile Code Equivalents Table (correction): There are several errors in this table. Below is the corrected table.

WORLD PROFILE CODE EQUIVALENTS

Value	Size	Atmos	Hydro	Pop	Law Code	Tech Code
0	Asteroid	Vacuum	Desert World	Low Pop	No Law	Pre-Industrial
1	Small	Vacuum	Dry World	Low Pop	Low Law	Pre-Industrial
2	Small	Vacuum	Dry World	Low Pop	Low Law	Pre-Industrial
3	Small	Vacuum	Wet World	Low Pop	Low Law	Pre-Industrial
4	Small	Thin	Wet World	Mod Pop	Mod Law	Industrial
5	Medium	Thin	Wet World	Mod Pop	Mod Law	Industrial
6	Medium	Standard	Wet World	Mod Pop	Mod Law	Pre-Stellar
7	Medium	Standard	Wet World	Mod Pop	Mod Law	Pre-Stellar
8	Large	Dense	Wet World	Mod Pop	High Law	Pre-Stellar
9	Large	Dense	Wet World	High Pop	High Law	Early Stellar
10	Large	Exotic	Water World	High Pop	Ext Law	Early Stellar
11	—	Exotic	—	—	Ext Law	Avg Stellar
12	—	Exotic	—	—	Ext Law	Avg Stellar
13	—	Exotic	—	—	Ext Law	Avg Stellar
14	—	Exotic	—	—	Ext Law	High Stellar
15	—	Exotic	—	—	Ext Law	High Stellar

Page 13, Homeworld Description Codes (correction and omission): Remove the -9 modifier to the Atmosphere roll for Asteroids; Asteroids should automatically have vacuum atmospheres. Add to the bottom of the Tech Code DMs column: Starport X, -2.

Pages 13 and 21, Default Skills, Rank and Service Skills (clarification): While characters generated with the Advanced Character Generation system do not gain default rank and service skills, advanced characters do gain the default skills for their homeworld tech codes.

Page 14, The Draft (clarification): If the result of submitting to the draft is not possible (for example, a character from a size 0 homeworld drafted into the Sailors), roll again.

Page 15, Aging (clarification): The aging rules used when a character reaches age 34 and beyond apply during *play* as well as during character generation. This is hinted at on page 16 in the paragraph on disability, but never explicitly stated in the rules. If any character has a birthday during an adventure session and reaches one of the ages shown on an Aging Table row (page 47), that character must immediately make the indicated saving throws to avoid losing UPP points.

Page 15, right column, Homeworld Limitations (clarification): After the sentence about Law Enforcers, Pirates, and Rogues, add the following sentence: "Weapon skill selections for Army and Marines characters are not restricted by the homeworld's law code."

Page 16, right column, Aging Crisis (omission): At the end of the first paragraph, a part of the line is missing: "A basic saving throw of 8+ applies to avoid death (subject to a DM for any attending Medical skill)."

Page 17, left column, Retirement (correction and addition): There is no Retirement Pay table; rather, the information is given in the Retirement Pay section, in the right column on page 17.

If a character being generated wants to undergo training in psionics, he musters out into the game.

Page 18, left column, Second Term (correction): Replace all references to commission with position.

Page 18, right column, Fifth Term, first paragraph (correction): Pension of Cr4000 per year should be Cr10,000 per year (5 terms, Cr2000 per term).

Page 18, right column, Fifth Term, Skills (correction): As Pilot was previously earned in term 3, the final paragraph should read "...and earns a final skill level of Pilot-3."

Page 18, right column, Mustering Out (correction): The cash table references are incorrect. Replace the first part of the paragraph with "Eligible for benefits (five rolls on the table for terms served and one more for his rank of 4th Officer), he gains (Cash table, roll 4=Cr10,000, Cash table, roll 3=Cr10,000) a bonus of 20,000".

Page 18, right column, Merchant Fourth Officer Doctor James Anderson (correction): The final resume should be as follows:

Merchant Fourth Officer Doctor James Anderson

556AC9 Age 38 5 Terms Cr20,000

Medical-3, Pilot-3, Grav Vehicle-2, Sensor Ops-1, Communications-1, Instruction-1, Brawling-1, Handgun-1, Zero-G Environ-1, Carousing-1, Computer-0, Vacc Suit-0

Auto Pistol, Low Passage

Starport B, Small, Thin, Wet World, High Pop, Mod Law, Avg Stellar

Pages 19 and 21, Mustering Out Benefit Objects, Weapons (clarification): Characters can choose any weapon that is not greater than their character's homeworld Tech Code, and is also within the homeworld's Law Code. Rogues, Pirates and Law Enforcers can select weapons that are one law code lower than their homeworld. Nobles, who are not subject to any homeworld restriction, can select any weapon.

Page 21, Mustering Out Benefits, Travellers' Aid (addition): Membership in the Society may also be purchased. Such purchase involves avoidance of a "blackball" (throw 4+ to avoid), and (if accepted) payment of an initiation fee of Cr1,000,000. Only one application per person is allowed.

Pages 20, 22 and 24, Mustering Out Benefits (correction): The Mustering Out Benefits table shown do not match the text on page 17. The correct table, which matches the text, is shown below:

Notice the rank bonus rolls are mutually exclusive. In other words, a character who is rank 5 or 6 gets 3 extra rolls; he does not count as rank 1, 2, 3 or 4.

MUSTERING OUT BENEFITS

Per term of service	+1
Rank 1 or 2	+1
Rank 3 or 4	+2
Rank 5 or 6	+3

Benefits Table: DM +1 if rank 5+.

Cash Table: DM +1 if Gambling-1+ or Prospecting-1+

References to a DM of +1 if retired below the Cash Table are incorrect and should be disregarded.

Page 21, Acquired Skills Tables (correction): On the Service Skills Table, die roll 1 under Scouts should be **Environ**, not Grav Veh; die roll 2 should be **Exploratory**, not Vacc Suit. On the first Advanced Education Table, die roll 5 should be **Space Combat**, not **Spl Cbt**. These changes allow Scouts to gain Survival, Survey and related skills, and eliminate the oddity of Scouts receiving Battle Dress training but starving on a mission to a low-tech world.

On the second Advanced Education Table, under *Sailors*, **Vehicle** should appear in bold as it is a cascade.

Pages 22 and 24, Basic Skill Eligibility (correction): Instead of "Upon receiving commission", this should read "Upon receiving a position".

Pages 22 and 24, Character Generation Checklist, Step 2C (correction): This step should read, "C. Roll for position (if not yet rank 1)."

Page 22, Mustering Out Cash Table, Diplomat (correction): The Army Cash Table was copied here; replace with the following:

<i>Die Roll</i>	<i>Cash Table (Cr)</i>
1	10,000
2	10,000
3	10,000
4	20,000
5	50,000
6	60,000
7	70,000

Page 22, Mustering Out Tables, Noble (correction): A die roll of 1 or 2 on the benefits table should result in High Passage; the Low Passage entry should not appear on the Noble's Benefits Table.

Page 23, Rank and Service Skills (omission): Some entries are missing from the table:

Bureaucrat Admin-1

Diplomat 1st Secy Admin-1

Page 25, Mustering Out Benefit Objects, Weapon (clarification): Player characters can choose any weapon that is not greater than their character's homeworld tech code, and is also within the homeworld's law code. Rogues, Pirates and Law Enforcers can select weapons that are one law code lower than their homeworld. Nobles, who are not subject to homeworld legal restrictions, can select any weapon.

Page 25, Mustering Out Benefit Objects, Corsair (correction): When a pirate character receives a Corsair as a benefit, it is wholly owned upon the first receipt of the benefit—no payments are ever made. No matter how many times the Corsair is received as a benefit, only one ship is received. This is consistent with the statement made on page 19, second column, under Starships.

Page 25, Mustering Out Benefit Objects, Travellers' (omission): The Belter and Rogue can gain Travellers' as a benefit, but the explanation does not appear on this page. The explanation on page 23 should be used.

Page 26, Character Formats, Rogue (omission): The Rogue is missing the automatic Streetwise-1 skill.

Pages 28 and 29, Skill List (addition): Add "Accelerator Rifle (Weapon)", "Assault Rocket Launcher (Weapon)", "Autoshotgun (Weapon)", "Flamethrower (Weapon)", "Gauss Pistol (Weapon)" and "Shotgun (Weapon)" to the skill list.

Page 28, middle column, Combat Rifleman skill (correction and addition): Combat Rifleman (Includes): Accelerator Rifle, Advanced Combat Rifle, Assault Rifle, Autorifle, Autoshotgun, Carbine, Gauss Rifle, Rifle, Shotgun, Submachinegun.

Page 28, middle column, Economic cascade (correction): Economic (Cascade): Admin, Broker, Legal, Trader.

Page 28, right column, Handgun skill (addition): Handgun (Includes): Autopistol, Body Pistol, Gauss Pistol, Pistol, Revolver, Snub Pistol.

Page 28, right column, Heavy Weapons skill (addition): Heavy Weapons (Includes): Assault Rocket Launcher, Autocannon, Grenade Launcher, Flamethrower, Light Assault Gun, Machine Gun, VRF Gauss Gun.

Page 28, right column, Interpersonal cascade (addition): Interpersonal (Cascade): Admin, Carousing, Interview, Liaison, Linguistics, Recruiting, Steward.

Page 29, middle column, Rifleman skill (addition): Rifleman (Includes): Accelerator Rifle, Autorifle, Assault Rifle, Autoshotgun, Carbine, Rifle, Shotgun, Submachinegun.

Page 29, middle column, Space Combat cascade (correction): Space Combat (Cascade): Fleet Tactics, Gunnery, Sensor Ops, Ship Tactics.

Page 29, middle column, Space Tech cascade (addition): Space Tech (Cascade): Communications, Computer, Engineering, Gravitics, Naval Architect, Vacc Suit.

Page 29, right column, Special Combat (addition): Special Combat (Cascade): Battle Dress, Combat Engineering, Combat Rifleman, Demolition, FA Gunnery, Forward Observer, Grav Belt. Heavy Weapons, High-G Environ, Recon, Stealth, Zero-G Environ.

Page 30, right column, Accelerator Rifle skill (addition): Accelerator Rifle (Weapon): The individual can use an Accelerator Rifle as a weapon.

Page 31, left column, Assault Rocket Launcher skill (addition): Assault Rocket Launcher (Weapon): The individual can use an Assault Rocket Launcher as a weapon.

Page 31, left column, Autoshotgun skill (addition): Autoshotgun (Weapon): The individual can use an Autoshotgun as a weapon.

Page 31, left column, Battle Dress skill (clarification): Add to the end of the sentence, "and the weapons systems normally associated with it".

Page 32, left column, Combat Rifleman skill (addition): Combat Rifleman (Includes: Accelerator Rifle, Advanced Combat Rifle, Assault Rifle, Assault Rocket Launcher, Autorifle, Autoshotgun, Carbine, Gauss Rifle, Rifle, Shotgun, Submachinegun).

Page 34, left column, Flamethrower skill (addition): Flamethrower (Weapon): The individual can use a flamethrower as a weapon.

Page 34, right column, Gauss Pistol skill (addition): Gauss Pistol (Weapon): The individual can use a Gauss Pistol as a weapon.

Page 34, right column, Grenade Launcher skill (clarification and addition): The individual can use all forms of grenade launchers, including RAM, auto, and RAM auto grenade launchers, as well as grenades launched from rifle-based launchers.

Page 35, left column, Gun Combat skill (clarification): Change the phrase "slug throwers" to "ranged weapons", as not all weapons in this cascade are slug throwers.

Page 35, left column, Handgun skill (addition): Handgun (Includes: Autopistol, Body Pistol, Gauss Pistol, Pistol, Revolver, Snub Pistol).

Page 35, left column, Heavy Weapons skill (addition): Heavy Weapons (Includes: Assault Rocket Launcher, Autocannon, Grenade Launcher, Flamethrower, Light Assault Gun, Machine Gun, VRF Gauss Gun).

Page 35, right column, Interpersonal cascade (addition): Interpersonal (Cascade: Admin, Carousing, Interview, Liaison, Linguistics, Recruiting, Steward).

Page 36, right column, Machine Gun skill (clarification and addition): The individual can use a machine gun or gatling gun.

Page 36, right column, Mass Driver skill (clarification and addition): The individual is trained in using mass drivers and other direct fire artillery (such as CPR guns and recoilless rifles) as battlefield weapons.

Page 36, right column, Medical skill (correction): Tasks shown are incorrect. Replace tasks with following sentence: Use of the Medical skill is governed by the Assessing Damage rules on page 75 of the **Players' Manual**.

Page 37, left column, Neural Weapons skill (correction): This should be "Includes:", not "Cascade:".

Page 38, left column, Rifleman skill (addition): Rifleman (Includes: Accelerator Rifle, Assault Rifle, Autorifle, Autoshotgun, Carbine, Rifle, Shotgun, Submachinegun).

Page 38, right column, Shotgun skill (addition): Shotgun (Weapon): The individual can use a shotgun.

Page 38, right column, Small Watercraft (correction): Change "Dry World" to "Desert World". Presumably, one could use small watercraft on a small body of water.

Page 38, right column, Space Combat cascade (correction): Space Combat (Cascade): Fleet Tactics, Gunnery, Sensor Ops, Ship Tactics.

Page 39, left column, Space Tech cascade (addition): Space Tech (Cascade): Communications, Computer, Engineering, Gravitics, Naval Architect, Vacc Suit.

Page 39, left column, Special Combat (addition): Special Combat (Cascade): Battle Dress, Combat Engineering, Combat Rifleman, Demolition, FA Gunnery, Forward Observer, Grav Belt. Heavy Weapons, High-energy Weapons, High-G Environ, Recon, Stealth, Zero-G Environ.

Page 40, left column, Trader (omission and correction): Much of the explanation of Trader skill was left out. The skill should read as follows:

Trader: The individual has an awareness of the techniques and practice of commerce in all its expressions.

Trader skill may be used to estimate resale value of items in the trade and commerce rules. Use of Trader skill allows one die on the Actual Value Table to be rolled before the table is consulted (giving the character a better indication of the actual value of specific goods). For each level of skill, the throw may be made three days prior to the actual sale. Thus, as a practical matter, Trader-3 is required to estimate actual value before transporting goods to another star system.

To estimate first die on a given cargo lot for a given system:

Difficult, Trader, Edu. Safe, absolute, 60 min.

Referee: On success, player generates the first die, and prediction will last for 3 days per level of Trader skill. On failure, no roll is made. Regardless of result, the task may not be retried.

Use of the Trader skill is governed by the Trade and Commerce rules on page 47 of the **Referee's Manual**.

Page 44, left column, College (correction): College graduates with NOTC enter either the Navy or Marines; college graduates with OTC can only enter the Army.

Page 45, left column, Merchant Academy (correction): Remove the phrase "and is immediately drafted into the Army for" with "and continues with". Since a character must be in the Merchants to enter the Merchant Academy, anyone unsuccessful simply continues with their first term as a short (three-year) term.

Page 45, Flight and Medical School (addition): The intent with character generation is that any one of these schools represents a significant career direction, and thus they are mutually exclusive. While it is not impossible, most people do not indulge in full-blown multiple career paths. If the player insists, the character must succeed at the following task:

To attend both flight school and medical school:

Formidable, End+Int

Referee: The character must have at least a DM of +3 or this task automatically fails.

Page 45, Flight School, second paragraph (clarification): Change the first part of the paragraph to:

"The success throw determines if the individual passes the course and is not washed out. Either way, the character has aged one year and reports for duty in the Navy or Marines. If successful, the indicated skills..."

Page 46, Brownie Points (clarification): Brownie points are a form of abstract “role-playing” to be used only during advanced character generation. They are not intended to be used after the character is generated.

Page 49, left column, Skills (correction): For Mercenary characters, the Combat Rifleman skill replaces the Rifleman skill in the Gun Combat cascade.

Page 50, Assignment Resolution (correction): For all branches, the parentheses are missing denoting that *officers* may not roll for promotion in those assignments. The following assignments should have parentheses:

Infantry, Cavalry, Artillery: Training, Internal Security, Garrison, Ship’s Troops.

Support: Training, Internal Security, Garrison, Ship’s Troops.

Commando: Training, Internal Security, Garrison, Ship’s Troops.

Page 51, Special Assignments (correction): DMs should be: Enlisted, DM +1 if Endurance 7+; All, DM +1 if Education 7+.

Page 51, Service Skills, NCO Skills (correction): The DM for E9 should be +3, not +2.

Page 51, Service Skills, Shipboard (correction): Remove “FI Tactics” from the set of choices, and eliminate the DM “+2 if O4+.”

Page 51, Military Occupational Specialty Table (correction): Die roll 2 under Infantry, Commando, and Ship’s Troops should be the Special Combat cascade, not Gun Combat.

Page 53, left column, Assignment Resolution, Survival (correction): Combat missions are battle, siege and strike—not police action, counterinsurgency or raid.

Page 54, Assignment Table (correction): Change die roll 3 from Shore Duty to Frozen Watch. This makes the table consistent with the Frozen Watch paragraph under Special Rules on page 53.

Page 54, Assignment Resolution (omission): The Technical branch assignment resolution table was accidentally left out:

Technical	<i>Training</i>	<i>Shore Duty</i>	<i>Patrol</i>	<i>Siege</i>	<i>Strike</i>	<i>Battle</i>
Survival	auto	3+	3+	3+	3+	3+
Decoration	none	none	none	none	9+	8+
Promotion	(7+)	8+	9+	8+	7+	7+
Skills	7+	8+	9+	7	7+	7+

DMs: For promotion, DM +1 if any branch skill 3+.

Page 54, Assignment Resolution (correction): For all branches, the DM text appearing after the tables are incorrect. The correct DMs text should be:

Line/Crew DMs: For survival, DM +1 if any branch skill level is 2+. For promotion, DM +1 if Edu 8+; DM +1 if Soc 9+.

Flight DMs: For survival, DM +1 if Pilot-2+. For decoration in battle or strike, DM +1 if Rank O1+.

Gunnery DMs: For promotion, DM +1 if Dex 9+. For decoration, DM +1 if Dex 10+.

Engineering DMs: For survival, DM +1 if Engineering-2+.

Medical DMs: For promotion, DM +1 if Medical-2+.

Frozen Watch: Characters survive, with no promotion, decoration or skills earned.

Page 54, Assignment Resolution (correction): For all branches, the parentheses are missing denoting that *officers* may not roll for promotion in those assignments. The following assignments should have parentheses:

Line/Crew: Training, Shore Duty.

Flight: none.

Gunnery: Training, Shore Duty.

Engineering: Training, Shore Duty.

Medical: Training.

Page 55, Service Skills, Petty Off column (correction): As this column is for non-commissioned officers, the DMs should be “+2 if E5+, +4 if E7+.”

Page 55, Service Skills, Staff Off column (omission): The DM “+4 if O7+” was left off the table for this column.

Page 55, Engineering School (addition): Under the Special Assignments column, add Naval Architect to the list of skills available at Engineering School. Naval characters can now acquire Naval Architect skill.

Page 56, Pre-Career Options (omission): Flight School was left out of the list of options available to Scouts.

Page 60, Pre-Career Options (omission): Flight School was left out of the list of options available to Merchants.

Page 60, Initial Activities (correction): Change Combat Arm Selection to Department Assignment.

Page 60, left column, Initial Activities, Draft (correction): Delete the reference to the draft. In **MegaTraveller**, Merchant characters never enlist via the draft. Flyers (a military career) have replaced Merchants (a non-military career) in this regard.

Page 62, Department Assignment (omission): DM +1 if Edu 9+.

Page 63, Skill Tables (clarification and addition): This table as published was copied directly from *Book 7—Merchant Prince* without revising it for **MegaTraveller**. Consideration and discussion suggest that it be replaced with the following:

SKILL TABLES

Die	Merchant Life	Shipboard Life	Officer Skills	Merchant Skills	Master Skills
1	Brawling	Gambling	Brawling	Interpersonal	Economic
2	Physical	Hand Combat	Vehicle	Broker	Space Tech
3	Gambling	Vacc Suit	Ship's Boat	Trader	Space
4	Trader	Zero-G Env	Gun Combat	Liaison	Exploratory
5	Mental	Technical	Liaison	Economic	Leader
6	Inborn	Inborn	Interpersonal	Legal	Vice

Die	Deck Skills	Engineer Skills	Purser Skills	Medic Skills	Admin Skills
1	Space	Mechanical	Interpersonal	Interpersonal	Admin
2	Economic	Technical	Medical	Medical	Liaison
3	Exploratory	Engineering	Liaison	Medical	Vice
4	Legal	Economic	Space Combat	Science	Economic
5	Ship's Boat	Space Tech	Steward	Technical	Academic
6	Leader	Gravitics	Liaison	Academic	Streetwise

Free Trader

Die	Sales Life	Planet Life	Life	Service	Business
1	Trader	Gun Combat	Physical	Interpersonal	Space Tech
2	Broker	Streetwise	Hand Combat	Trader	Space
3	Technical	Vacc Suit	Streetwise	Broker	Interpersonal
4	Liaison	Vacc Suit	Mental	Economic	Legal
5	Economic	Gun Combat	Vice	Space Combat	Exploratory
6	Economic	Brawling	Legal	Leader	Economic

Merchant Life available to all characters. Shipboard Life available to all (including Free Traders) except Sales and Admin Departments. Officer Skills available to rank O0+. Merchant Skills available to all (including Free Traders) except Engineering Department. Master Skills open to Deck Department rank O4+.

Page 63, Special Duty (omission): The information on Special Duty resolution was inadvertently omitted:

SPECIAL DUTY

Die	Deck Hands	Officers
1	Security Trng	Trade School
2	Trade Station	Command School
3	Helm Trng	Deck School
4	Drive Trng	Engineer School
5	Steward Trng	Purser School
6	Commission	Business School
7	Commission	Department Test

DMs: If Edu 9+, DM +1. If rank O4+ and not in Deck department, DM +1.

SPECIAL DUTY RESOLUTION (1D)

Business School: Throw 5+ for: Admin, Computer, Legal, Liaison. Confers DM +1 on the exam (when taken) for O6+. Transfer to Sales department.

Command School: Throw 5+ for: Admin, Leader, Legal, Ship Tactics. Transfer to Deck department.

Commission: Receive rank O0 (rank O1 in the Free Traders) and Department Assignment (determine specific assignment and resolve normally). Must pass an examination for promotion within 4 years or revert to enlisted rank.

Deck School: Throw 5+ for: Communication, Computer, **Gunnery**. Transfer to Deck department.

Department Test: Individual may take a Department test for promotion without regard for skill requirements.

Drive Training: Throw 5+ for: Electronics, Engineering, Gravitics, Mechanical. Transfer to Engineering department.

Engineering School: Throw 5+ for: Admin, Computer, Electronics, Engineering, Gravitics, Mechanical. Transfer to Engineering department.

Helm Training: Throw 5+ for: Navigation, Pilot, Sensor Ops, Ship's Boat. Transfer to Deck department.

Purser School: Throw 4+ for: Admin, Computer, Liaison. Transfer to Purser's department.

Security Training: Throw 4+ for: Zero-G Environ, Vacc Suit, Brawling, Computer.

Steward Training: Throw 4+ for: Admin, Liaison, and Steward. Transfer to Purser's department.

Trade Station: Receive Trader Skill. Throw 4+ for: Broker, Liaison. Transfer to Admin department.

Page 65, Merchant Prince Character Generation Checklist (clarification): Step 2B is not missing, it was moved to Step 4 (Merchant Academy).

Page 66, 75, Hits Value and Character Damage (clarification): After a combat session has finished, any damage the character has taken to his life force is applied back to his stats. If the character enters combat again before any healing has taken place, you will use his lower, damaged life force he had at the end of the immediately previous combat session.

Now if some healing has taken place, you'll need to determine what his new, less-than-full life force might be, and use it in the next combat session about to take place.

But unless your character needs to go into combat, don't worry about figuring out his less-than-full life force. Only if the wounded character ends up in combat before he's healed is it worth checking to see what his life force values are before he's good as new again.

Page 66, Tactical Points Pool (addition): Some referees have reported that their players are abusing the tactical points pool. The intent of tactical points is to simulate the effect of tactics skill being shared among the group before and during the fight. This leads to some suggestions to avoid abusive use of the tactical points pool:

- The single highest tactical skill level from among the group represents the maximum possible draw from the pool available at any one time. Thus, if the highest Tactics skill possessed by any one character in the group is Tactics-3, the maximum draw at any one time is 3.
- If the referee feels a questionable use of tactics points is occurring (such as a character with Handgun-0 getting 8 points from the tactics pool to get a good chance of getting a hit), force the player to roll a special communications task (using whatever is appropriate: radio, shouting, and so on) with another character who has Tactics skill. If the task is successful, the Handgun-0 character may only draw as many tactical points from the pool as the character he communicated with has as a Tactics skill level.

However, the referee should only use this task as a last resort to keep abuses in line: the questionable situation has to be really "stretching it" before this rule should be used.

- Characters do not have to contribute all their Tactics skill as points to the pool. They may hoard some of their Tactics skill for themselves, creating their own private tactics pool. This may sometimes be out of character, however.

Page 67, left column, Surprise (correction): In the referee's paragraph of the task for determining surprise, change "If any mishap occurs..." to "If exceptional failure occurs...". Thus, if the attacking party gets exceptional failure on the surprise task roll, the defending party has surprise instead.

Page 67, definitions sidebar, Distance Scale (correction): The last line of the Distance Scale definition should read: "Therefore this weapon's danger space is one square in the 15m scale."

Page 67, left column, Surprise (correction): The task for determining if an attacking party has surprise should have "(unskilled OK)" at the end of the task line.

Page 68, left column, Surprise (correction): The task for raising an alarm during a surprise attack should have "(unskilled OK)" at the end of the task line.

Page 68, left column, Interrupts (corrections and clarifications): The movement DM is always the speed of the interrupting unit. The interrupting unit may act against anyone or anything, not just the unit interrupted.

Remove the note in the task "The interrupted unit's turn is considered spent for the combat round". Once the interrupting unit finishes his interrupt, the interrupted unit gets to complete his turn as if nothing had happened (if capable).

Change the line "Unintelligent animals never perform an interrupt" to read: "Unintelligent animals never perform an intelligent interrupt". An animal that by nature leaps at its prey will interrupt by jumping at a man, even though that man is fully protected by combat armor. An animal that by nature flees at loud noises will interrupt to run away from a defenseless human who is yelling at the top of his lungs.

Page 68, Interrupt Restrictions (revision): Strike the rule that states, "a unit cannot interrupt the turn of another on his own side". The idea with this rule was to avoid a complicated chain of interrupts. However, sometimes a character on your own side may do something stupid, and it makes sense to be able to interrupt to either help him out or to try and stop him. The rule of "no more than one interrupt per side" serves quite well to keep interrupts in check.

Page 68, right column, Matching Vectors (revision): The last sentence of the referee's note, starting with "If this task is successful..." should be replaced with the following: If this task is successful, use the difference in speed as movement DM on the "to hit" task.

Page 68, right column, Fire Control (clarification): The table below simplifies the Movement DM rule:

**MOVEMENT DM GUIDE
(% OF TARGET SPEED)**

<i>Range Bands</i>					
C/S	M	L	VL	D	VD+
100	50	25	10	5	—

Page 68, right column, Fire Control (revision): Add the following as the last sentence in the paragraph: "Vehicle mounted weapons with point defense targeting modules suffer no penalty when firing at moving targets."

Page 69, left column, Fire Combat (addition): Insert the following section after the Direct Fire section:

Point Defense Fire: Direct Fire weapons equipped with a point defense targeting module can fire at incoming direct fire missiles, grenades, rockets, and indirect fire from mortars, howitzers, high-velocity guns, multiple rocket launchers, and mass drivers. Incoming rounds must be visible by direct line-of-sight by the point defense system for at least 150 meters of their trajectory in order to be targeted. When engaging direct fire projectiles, the firing point defense system must also have line-of-sight to the vehicle or object targeted by the projectiles.

The range at which a point defense system can engage is limited by the shorter of the weapons range or the range at which a fire controlled weapon can engage with *Routine* difficulty (V. Long for TL 9-13, Dist. for TL 14+). Apply a +1 modifier to the roll for each tech level above 9 of the firing point defense targeting module (a TL10 module receives a +1, TL11 receives +2, etc.).

A marginal success on the task roll destroys one incoming round; if there is exceptional success (see page 71) each level by which the task roll is exceeded destroys additional incoming rounds. The number of rounds destroyed doubles for each additional level of exceptional success (so a +4 exceptional success will destroy 1+2+4+8+16 = 31 rounds). The effectiveness of Point Defense fire is halved against multiple rocket launchers, which are designed to saturate point defenses (so, in the preceding example, the 31 rounds result would be halved to 16 when firing against MRL rounds: always round in the defenders favor).

The player firing the point defense weapon decides which incoming rounds are destroyed. Point defense weapons ignore the 'small target' difficulty level increase. Non-grav ground vehicles may not move if they are to perform point defense fire.

Page 69, right column, Hand-to-Hand Combat Tasks: If the referee prefers, the two hand-to-hand combat tasks may be combined into this single task:

To hit another unit with a hand-to-hand attack:

Routine, Off=Weapon skill, Str; Def=Weapon skill, Weapon Def (confrontation).

Referee: If the attacker is unskilled, increase the difficulty of this task by one level; if the defender is unskilled, decrease the difficulty of this task by one level.

The defender may use his weapon (whatever weapon he currently has) for defense. Note that the defender may later conduct a hand-to-hand attack with his weapon if he has not yet taken his turn. The defender may attempt to preempt the attack by interrupting the attacker (NOTE: Use Dex in place of movement speed as the DM when interrupting a hand-to-hand attack in this manner). The defender may not attempt to interrupt anyone other than the attacker.

Failure means defender blocked or avoided the attack.

Page 70, left column, Hand-to-Hand Interrupts (clarification): A unit undergoing a hand-to-hand attack can try to interrupt the attacker; in this case, use the interrupting unit's Dex as the DM in place of movement speed. In effect, two units locked in hand-to-hand combat may interrupt each other, but no other units.

Page 70, Penetration and Damage (clarification): In all combat computations, drop fractions. A penetration of 3 reduced in half becomes 1. A damage of 0.3 becomes 0.

Page 70, left column, Penetration and Attenuation (clarification): An attenuation of 2 means that starting with *short range*, the penetration stays the same for two range bands (short and medium in this case). So the halving takes place at *long range*, not medium range.

To better explain and simplify the attenuation rules in the **Players' Manual**, the following table is provided:

PENETRATION/ATTENUATION GUIDE (%)

Range Bands												
Atten	C/S	M	L	VL	D	VD	RG			XO		SY
							CN	PL	FO	IP	ST	SS	IS
/1	100	50	25	10	0	0	0	0	0	0	0	0
/2	100	100	50	50	25	25	10	0	0	0	0	0
/3	100	100	100	50	50	50	25	25	10	10	0	0
/4	100	100	100	100	50	50	50	25	25	25	10	10
/5	100	100	100	100	100	50	50	50	50	25	25	10
/6	100	100	100	100	100	100	50	50	50	50	25	25

Page 70, right column, Penetration (clarification): A weapon with a penetration of 0 is only effective against unarmored characters or animals. In this case, the weapon penetration equals the target armor value (both are 0). By default, a successful hit gives a *low penetration* result, so the weapon inflicts 50% damage.

If the target has an armor value of 1+, a penetration 0 weapon rarely does any damage. In this case, the weapon gets a *zero penetration* result, giving just 10% damage. If a target is completely enclosed in armor, and if the penetration is less than one-tenth of the target's "lightest" armor value, ignore exceptional success. Your hit cannot do any damage to the target, regardless of the type of attack (hand-to-hand, direct, or indirect fire). (This prevents a small animal attacking with just its teeth from knocking out an opponent in battle dress.)

What is perhaps not so obvious is what a weapon with a penetration value of 1 or more will do against a target with an armor value of 0. In this case, no matter what the weapon's penetration is, it always gets a *high penetration* result—which means it inflicts 100% damage.

The table below clarifies the relationship between penetration and damage:

PENETRATION AND DAMAGE (%)

Pen vs. Armor*	Pen	Level of Success				
	Type	+0	+1	+2	+4	+8
Pen < Armor	Zero	ne**	ne**	1pt**	2pt**	4pt**
Pen ≥ Armor	Low	25	50	100	200	400
Pen ≥ Armor×2	High	50	100	200	400	800

*Pinpoint hit or target under cover, use armor +2

**ne=no effect; pt=points of hit damage, no matter what the weapon damage.

Vehicles and robots take 10% of regular weapon damage as superstructure hit.

Page 71, Damage to Vehicles and Robots (addition): All explosive rounds which penetrate a vehicle's hull also cause crew hits to all crew members in the danger space of the explosion (at half the penetration value of the explosive round).

Page 72, Weapon Enhancements (addition): A character who remains stationary for the combat round and can brace against something may use the Gyrostable difficulty profile when firing his weapon.

Page 72, Fire Controlled (correction): At Tech 6, the difficulty for Long range should be Routine, not Difficult.

Page 72, Line of Fire (addition): The target closest to the firing unit and in the line of fire is attacked first, *ignoring all friendly units*. However, if exceptional failure occurs when rolling for a hit, then friendly units are included when determining the closest target. (In other words, don't get exceptional failure or you may hit some of your own guys who happen to be in the line of fire!)

Page 72, Vehicle Hit Value (addition): For purposes of personal combat only, multiply a vehicle's hit value by 10 before starting the combat session. For example, a ground car lists hull hits of 2/5. Its actual hit value in personal combat is 20/50 (multiplied by 10). In a similar manner, its locomotion and power plant hits are each 10/20 (1/2 multiplied by 10). Use the unmodified values for starship combat rather than personal combat (see the errata entry for *Referee's Manual* page 94, Power Plant-n).

Page 72 and 73, Danger Space, Group Hits and Autofire (clarifications and additions): The following rules more clearly explain danger space, group hits and autofire.

As the referee, when faced with a potentially confusing combination fire attack, you will save yourself a lot of headaches if you *always* determine a *single primary target* before you begin resolving hits. Once the single primary target has been identified in a combination attack, it remains the primary target for the entire combination attack. If the firing unit wants a shifting primary target, then he is conducting rapid fire instead.

Once the single primary target has been selected, resolve a combination attack by starting with automatic fire hits. Automatic fire weapons give the firing unit additional "bonus attacks". Roll a "to hit" task on the primary target as normal, then roll an identical "to hit" task for each adjacent target (player's choice), up to the number of autofire targets possible. The firing unit has considerable freedom when specifying which adjacent targets—the attacking unit may actually apply *all* of its autofire attacks to the primary target if it wants to, *as long as* no other potential targets exist along the line of fire in the same range band. In any case, each autofire attack requires its own roll.

The line of fire rule also comes into play here. A good way to use the line of fire rule with autofire is to make the closest target in the line of fire the *default* primary target, with all other targets in the line of fire becoming adjacent targets. Any leftover autofire attacks (after applying at least one hit roll to each target in the line of fire) can be applied to laterally adjacent targets. In any event, leftover attacks should prefer the primary target for remaining unused attacks.

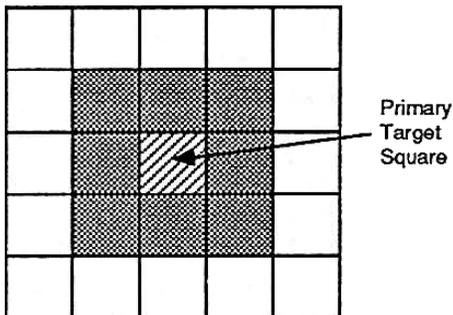
This leads us to a concept of "preferred target precedence". A preferred target should take more hits than any other target. The preferred target precedence for autofire is:

1. Primary target;
2. Targets adjacent to the primary target and in the line of fire;
3. Targets adjacent to the primary target and *not* in the line of fire.

Put another way, the primary target (item 1) should never take fewer autofire hits than adjacent targets in the line of fire (item 2), and targets in the line of fire should never take fewer autofire hits than targets not in the line of fire (item 3). If the attacker wishes to violate this precedence, require exceptional success for each "to hit" roll which violates it. The hit reverts to standard precedence if exceptional success is not achieved.

Danger space represents how much the weapon "spatters" or "sprays" when it hits; that is, what collateral damage the weapon does to nearby targets when it hits the primary target. These collateral hits are known as *group hits*. All units in a weapon's danger space are subject to group hits. Danger space is always expressed in meters.

To determine the danger space in squares, divide by the distance scale being used and round 0.5+ fractions up. The result indicates the number of squares (including the primary target square) to which the danger space extends. The danger space extends in all directions from the primary target square.



ARL Danger space of 2 squares at 1.5 meter scale

Pages 72 and 73, Danger Space (omission): The danger space for flechette rounds applies only along the line of fire and is not circular like the danger space for all other rounds.

Page 73, Pinpoint Location (suggestion): Some players have reported abuses with the pinpoint hit location rule as written, since specifying such a shot reduces the target's armor rating by one-half. An easy fix is to change the rule to increase the task in difficulty one level when a pinpoint location is specified, rather than requiring exceptional success. This makes a pinpoint location shot work the same as a shot at a small target (page 69). Increasing the difficulty for a pinpoint location hit also works nicely because if the player wants to take great care in making the shot, he can try for a cautious attempt. Many players will feel the increase in difficulty is not worth the lowered armor rating, which ends the abuse problem.

Page 73, right column, Indirect Fire (addition): Insert the following paragraph at the end of the existing section:

Weapons with point defense fire control can engage incoming indirect fire rounds targeted to land anywhere out to the range at which the difficulty for the point defense weapon to engage them would remain at most Routine. The procedure is the same as for point defense against direct fire (see page 69).

Page 73, Hand-Throwing Grenades (omission): Hand-throwing a grenade at a target is a special situation, and has its own special task:

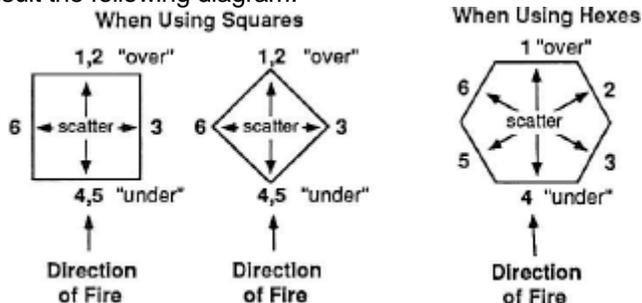
To hit a target square with a hand-thrown grenade:
[difficulty], Str, Dex, absolute: 1 combat round (fateful).

Referee: Use the direct fire thrown difficulty profile when hand-throwing a grenade at a square. If the task fails, the grenade fails to hit its intended square, so it scatters. Contrary to normal indirect fire, a hand-thrown grenade can scatter back into the thrower's square.

If the grenade hits an obstruction (such as a wall, closed portal, or fence), it stops and scatters no further.

The final location of the grenade is where it explodes: it explodes at the end of the thrower's turn.

Scatter: If indirect fire fails to hit its intended target, it scatters randomly. To determine direction of scatter, roll 1D and consult the following diagram:



The distance of the scatter depends on the mishap level—with Forward Observer skill (or Strength plus Dexterity in the case of hand-thrown grenades) usable as a special minus DM on the mishap table in this case:

Superficial: 1D% of the distance from the attacker to target (minimum 1 square).

Minor: 2D% of the distance from attacker to target (minimum 2 squares).

Major: 3D% of the distance from attacker to target (minimum 3 squares).

Note: Indirect fire (exception: hand-thrown grenades) can never scatter into the firing weapon's square. If it does, roll for a different scatter direction.

Page 74, Range Table (correction): At the 150 meters per square scale, Medium=0, Long=1, Very Long=3, and Distant=15. At the 1,500 meters per square scale, Long=0, Very Long=1, Distant=3, and Very Distant=15.

Page 74, Personal Armor table (correction and additions): The following values should be corrected and added on the Personal Armor Table:

Type	Value
Leather	(1)
Chainmail	2
Plate	3
Clamshell	8
Reflec	[10]

Page 74, Hand-to-Hand Weapons table (omission): Add "Foot/Kick, Pen 1, Block 1, Damage 2".

Page 74, Large Blades table (omission): The block missing values are: Sword 3, Cutlass 2, Broadsword 2.

Page 74, Polearms table (correction): Change damage values as: Bayonet 2, Spear 3.

Page 75, Treatment of Injured or Sick Characters (correction and clarification): The injured character must be given initial diagnosis and treatment according to the following table:

INITIAL DIAGNOSIS AND TREATMENT

Wound Level	Must diagnose in next...	If not...	Comments
Superficial	2D hours	2D mishap (infection)	Don't reroll if not treated
Minor	1D×10 minutes	2D mishap (trauma)*	Unconscious for 3D minutes
Major	2D minutes	3D mishap (blood loss)*	Unconscious for 1D hours
Destroyed	1D minutes	death†	

*If successful initial diagnosis/treatment is not received in the required time and the character is still alive, reroll for mishap every hour until at least initial treatment is received, or the character dies.

†If a TL12+ medical kit is used and the initial diagnosis/treatment is successful, the character may be kept barely alive long enough to be put in TL9+ medical facilities (or low berth) if this is done within 1D days. If the character is in low berth, or he is in medical facilities of at least TL9, his characteristics remain at zero, and he is vulnerable to any influence that interferes with his life support (for example, a severe jolt, depletion of supplies, and so on). As long as the character has constant medical attention, and his life support is not threatened, he may be sustained in this condition up to 2D months.

To perform initial diagnosis/treatment for an injury:

Routine, Medical, Int, 2 min (uncertain).

Referee: This task assumes external injuries (damage to a limb or the head). If the injuries are internal (upper or lower torso organs), double the time increment. If **Some Truth**, treatment may be made, but may be less than optimum: secretly roll 2D on the Mishap table—on a major mishap, apply 1D points of additional damage.

If a TL7—11 medical kit is used, reduce the time increment on this task to 30 sec for external injuries and 1 min for internal injuries.

If a TL12+ medical kit is used, reduce the time increment on this task to *instant*.

If this task is performed in the field (first aid), increase the difficulty one level.

For superficial wounds, final treatment is required only when an infection mishap occurs.

To perform final treatment:

[treatment difficulty], Medical, Int, 10 min.

Referee: The difficulty level of this task depends upon the amount of damage the patient has sustained; consult the table below.

<i>Treatment</i>		<i>Surgery</i>	<i>Inactivity</i>	<i>Healing Rate</i>
<i>Wound Level</i>	<i>Difficulty</i>	<i>Required?</i>	<i>Period</i>	<i>After Inactivity Period</i>
Superficial	Simple	No	None	+1 per day for each char
Minor	Routine	Maybe*	2D days	+1 per day for single char
Major	Difficult	Yes	1D×10 days	+1 per day for single char
Destroyed	Formidable	Yes†	Until healed†	+1 per month for single char†

*Surgery is required for all minor gunshot, fragment, blade, and puncture wounds. It is not needed for minor laser and energy weapon burns.

†To recover, a “dead” character must receive final treatment in a medical facility of at least TL13. If successful treatment is not received within 2D months (as indicated above), the character dies. A special DM of +1 per TL over 13 is allowed on the final treatment task. If the treatment is successful, the character is comatose, with all level 0 characteristics increased to 1.

On damage which requires surgery, a character with at least Medical-3 and Dex 8+ is required, otherwise increase the task difficulty by one level.

The task duration determines how much time that the attending physician must spend on treatment; a period of inactivity/healing is usually required for recovery.

If a superficial or minor mishap occurs, apply additional damage to the character.

If a major or destroyed mishap occurs, the character may take permanent damage; reroll 2D on the Mishap table to determine the amount of permanent damage taken by the character. The referee must determine how the damage is to be applied: all characteristics are eligible for receiving damage.

HEALING

The healing varies depending upon the level of wounding.

Superficial: Normal activity can be resumed after treatment.

Healing Rate: +1 per day for each injured characteristic.

Cost: Roll 3D for the cost in credits of miscellaneous medical items.

Minor: The injured character must spend 2D days of total inactivity. The character may be moved by others, but must remain in bed. During the inactive period, all characteristics will be halfway between their wounded level and the original; at the end of the period, final healing will take place.

Healing Rate: +1 per day for 1 characteristic (player’s choice).

Cost: Non-surgical, Cr10×2D; surgical, Cr500×1D. If inactivity is in a hospital, Cr500 per day for 1D days, Cr100 per day thereafter. Field care is Cr50 per day.

Major: The injured character must spend 1D×10 days of total inactivity. The character may not be moved by others, and must remain in bed. During the inactive period, all characteristics will be halfway between their wounded level and the original; at the end of the period, final healing will take place.

Healing Rate: +1 per day for 1 characteristic (player’s choice).

Cost: Surgery, Cr1,000×1D. If inactivity is in a hospital, Cr500 per day for 1D days, Cr100 per day thereafter. Field care is Cr50 per day.

Destroyed: When any one characteristic reaches 4 (or its original level, if less), the character regains consciousness. When two of the three characteristics reach their original level, no more healing occurs. The character must remain inactive until healing ends. The character may be initially treated on a TL13+ world and then removed to a lower TL world for healing. The character may resume limited non-physical activity as soon as all characteristics have reached 4 (or full level if less).

Healing Rate: The character must decide which characteristic to restore. Roll 2D for 9+, with a DM of +1 per facility TL over 12. If successful, add 1 to the characteristic for the month.

Cost: Low berth costs, Cr1,000 per week. Treatment, Cr250,000. Healing in a hospital (required), Cr150,000 per month.

Page 76-79, Weapons Tables (omission): The various acronyms used throughout this section are not explained anywhere.

WEAPON/AMMUNITION ACRONYMS LIST

- ACR:** Advanced Combat Rifle
- CBM:** Cluster Bomblet Munition
- CPR:** Chemically Propelled Round
- HE:** High Explosive
- HEAP:** High Explosive, Armor-Piercing
- KEAP:** Kinetic Energy, Armor-Piercing
- KEAPER:** Kinetic Energy, Armor-Piercing, Explosive Round
- MRL:** Multiple Rocket Launcher
- RAM:** Rocket Assisted Munition
- VRF:** Very Rapid Fire

Page 76, Slug Throwers (correction): The following table is corrected (corrections are highlighted):

<i>Slug Thrower</i>	<i>Ammo Notes</i>	<i>Rds</i>	<i>Pen/Atten</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Autofire Targets</i>	<i>Danger Space</i>	<i>Signature</i>	<i>Recoil</i>	<i>Difficulty As</i>
Auto Snub Pistol (10mm)	HE	20	1/-	4	Medium	—	1.5	Med	Low/R	Handgun
	HEAP	20	6/-	4	Medium	—	1.5	Med	Low/R	Handgun
	tranq	20	1/-	1	Medium	—	1.5	Med	Low/R	Handgun
	gas	20	—	1	Medium	—	1.5	Med	Low/R	Handgun
Rifle, Bolt Action (7mm)	—	6	3/2	3	V Long	—	—	Med	Med	Rifle
Rifle (7mm)	—	20	3/2	3	V Long	—	—	Med	Med/R	Rifle
Rifle (9mm)	—	20	4/2	3	V Long	—	—	Med	Med/R	Rifle
	tranq	20	1/-	1	V Long	—	—	Med	Med/R	Rifle
Hunting Rifle (13mm)	—	2	5/2	4	Long	—	—	Hi	Hi	Rifle
	tranq	2	3/-	2	Long	—	—	Hi	Hi	Rifle
Gauss Rifle (4mm)	—	40	7/4	4	Distant	3	—	Low	Low/R	Rifle**
	tranq	40	2/-	1	Distant	3	—	Low	Low/R	Rifle**
Shotgun	pellets	10	1/1	4	Medium	—	1.5	Hi	Med	Rifle
	bullets	10	3/1	4	Medium	—	1.5	Hi	Med	Rifle
	tranq	10	1/-	1	Medium	—	1.5	Hi	Med	Rifle
	gas	10	—	1	Medium	—	3	Hi	Med	Rifle
Autoshotgun	pellets	20	1/1	4	Medium	2	1.5	Hi	Med	Rifle
	bullets	20	3/1	4	Medium	2	1.5	Hi	Med	Rifle
	tranq	20	1/-	1	Medium	2	1.5	Hi	Med	Rifle
	gas	20	—	1	Medium	2	3	Hi	Med	Rifle
Assault Rifle (5mm)	—	30	2/2	3	V Long	2	—	Med	Med	Rifle
Assault Rifle (7mm)	—	30	3/2	3	V Long	2	—	Med	Med	Rifle
Accelerator Rifle (6mm)	—	15	3/-	3	Medium	2	—	Med	Low/R	Rifle
Adv Combat Rifle (7mm)	—	20	3/3	3	V Long	2	—	Med	Med	Rifle**
	DS	20	4/3	3	V Long	2	—	Med	Med	Rifle**
	tranq	20	2/-	1	V Long	2	—	Med	Med	Rifle**
Adv Combat Rifle (9mm)	—	20	4/3	3	V Long	2	—	Med	Med	Rifle**
	DS	20	6/3	3	V Long	2	—	Med	Med	Rifle**
	HE	20	3/3	3	V Long	2	1.5	Med	Med	Rifle**
	tranq	20	3/-	1	V Long	2	—	Med	Med	Rifle**
Light Assault Gun	HE	5	3/1	4	V Long	—	1.5	Med	Hi	Rifle
	KEAP	5	8/3	4	V Long	—	—	Med	Hi	Rifle
	flech	5	2/3	2	Long	—	30	Med	Hi	Rifle
	tranq	5	2/-	1	Long	—	30	Med	Hi	Rifle

Page 76, 7mm Bolt Action Rifle (addition): The 7mm Bolt Action Rifle listed in this errata is available at TL 4 and costs Cr100. In all other respects, it is identical to the standard 7mm rifle listed on page 75 of the **Imperial Encyclopedia**.

Page 77, Personal Energy Weapons (addition): The flamethrower was left off the original charts:

<i>Weapon</i>	<i>Ammo Notes</i>	<i>Rds</i>	<i>Pen/Atten</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Danger Space</i>	<i>Signature</i>	<i>Recoil</i>	<i>Difficulty As</i>
Flamethrower	fire	5	0	10	Medium	2	Hi	Medium	Rifle

Page 78, Grenade Launchers (correction): The HE and HEAP pen/atten values were accidentally switched on all the grenade launchers. HEAP rounds are designed to pierce armor and thus have a greater penetration than HE rounds.

Page 80, Starship Weapons (correction): The fusion weapons listed do not match the starship weapons charts in the Referee's Manual. To correct this, change Fusion-15 to Fusion-14 and Fusion-16 to Fusion-17.

Page 81, Mines (addition): Add the chart for the mines detailed in the **Imperial Encyclopedia**:

<i>Weapon</i>	<i>Ammo</i> <i>Notes</i>	<i>Pen/</i> <i>Atten</i>	<i>Dmg</i>	<i>Danger</i> <i>Space</i>	<i>Signature</i>
APERS mine	HE	TL+2	8	1	Med
Bounding APERS	HE	TL+2	8	6	Med
Directional mine	Flech	TL+2/1	8	6/50	Hi
Antitank mine	HEAP	TL×3	40	30	Hi
Chemical mine	*	0	*	18	Med
Trip-wire mine	Signal	0	1	—	Hi
	Flare	0	1	(50)	Hi
	HE	TL+2	7	3	Med

*see details in **Imperial Encyclopedia** errata.

Page 83, Duke Norris, last sentence (correction): Duke Norris was named Archduke of Deneb in 1116, not 1114.

Page 85, NPC Morale, left column, last sentence (correction): Change the word moral to morale, as in: “Depending upon how significant the segment with the lower morale is...”.

Page 87, Corridor Sidebar (correction): Varian is incorrectly identified as the acting Emperor. Varian’s younger brother Lucan is in fact the acting Emperor; Varian lost his life in the ensuing struggle following Emperor Strephon’s assassination.

Page 88, Line of Sight, Obstructions, Cover and Sighting (clarifications and additions): The following rules more clearly explain line of sight, obstruction, cover and spotting.

LINE OF SIGHT: INDOOR COVER

Indoors, three main types of cover are available: corners, consoles (or furniture) and machinery.

Corners: Doorways and bends in corridors constitute corners for the purpose of determining cover. It is, of course, possible to use such obstructions to interrupt the line of sight completely, and thus to be considered *hidden*.

A character behind such a corner may, however, lean out from behind it and fire. For targeting purposes, the character is considered to be *under cover but visible* in the square into which he is leaning.

Consoles (or Furniture): Units may crouch behind consoles and thus be counted as *hidden* (unable to fire or be fired upon).

Alternatively, they may partially expose themselves and fire (and be fired at), in which case they are considered to be *under cover but visible* for any fire directed at them.

Machinery: A unit adjacent to machinery may fire through it and be fired upon through it.

The unit adjacent to the machinery square is considered to be *under cover but visible* unless the firing unit is also adjacent to the same machinery square - in which case, neither is considered to be under cover.

If neither the firing unit nor the target unit are adjacent to the machinery square through which a line of sight would pass, the machinery square becomes an *obstruction*, and the line of sight may not pass through it.

LINE OF SIGHT: ILLUMINATION AND DARKNESS

Combat generally takes place in an indoor or outdoor location that is well lit. When combat takes place in darkness, vision is impaired.

Characters or robots may turn off inside lights using switches placed on walls or bulkheads near portals. The referee may specify that certain areas are in darkness because of power or system failure.

Combat outdoors at night also takes place in darkness.

Depending on the amount of background light available, the referee must decide whether the darkness is partial or total (partial darkness is more common). When an area is in darkness, use the visibility and spotting rules.

When in darkness, increase the difficulty of all “to hit” and spotting tasks by one level.

Darkness does not apply if the weapon, character, robot or vehicle has vision enhancement devices.

LINE OF SIGHT, VISIBILITY AND SPOTTING

Basic combat provides some simple visibility and spotting rules in the form of the cover status: *under cover but visible* and *hidden*. These rules introduce a new type of cover status: *under cover, not visible*. This cover status means you can see the enemy, but he can’t see you.

At the ground scale covered in most outdoor combat sessions, few playing areas cover an area more than several hundred meters, which is well within normal visibility ranges. As a result, the primary limitation on line of sight which provides for an under cover, not visible status is target concealment.

The indoor visibility is generally a problem only when darkness (either partial or total) exists.

The following discussion further defines how light of sight works.

Units: Characters, animals, robots and ground vehicles do not block line of sight.

Hills: Hills block the line of sight.

Vegetation: Trees block the line of sight, with certain modifications. Units on the ground (or flying nap-of-earth) cannot see through dense trees, but can see through up to 50 meters of sparse trees (to medium range).

Tree-covered areas also affect observation from above.

In dense trees, the sky is considered entirely blocked by branches, leaves or the equivalent; thus units in dense trees may not see or be seen if the line of sight passes through this canopy.

In sparse tree areas, this canopy is broken; a vehicle in the air may see through the canopy (and be seen) for a radius on the ground equal to 20% of the vehicle's altitude above the ground; for example, a vehicle at 250 meters altitude can see (and be seen by) a unit on the ground up to 50 meters away from the point directly below the vehicle.

Trees vary in height, but average about 10 to 30 meters; the leaf canopy may begin at varying heights, but should average half the height of the trees.

Undergrowth has no effect on the line of sight.

Buildings: Buildings block the line of sight. Units in buildings who are not on the ground floor can see units not adjacent to lower obstacles. Buildings are 4 meters tall per story.

Smoke Screens: The line of sight terminates at a smoke screen. Smoke screens are 15 meters high.

Under Cover, Not Visible (Concealed): Terrain features which do not block the line of sight may make a unit harder to see. Characters, animals or robots are concealed if they are in an area of trees or undergrowth. Vehicles are concealed in areas which contain both sparse trees and any kind of undergrowth (dense or sparse).

Units may also be deliberately camouflaged. If a unit is concealed at the beginning of the combat session, the referee may allow it to be counted as camouflaged. If so, it remains camouflaged until it moves for the first time.

In partial darkness, all units beyond medium range are considered concealed.

In total darkness, all units beyond short range are considered concealed.

Hidden Units: In some terrain, units may choose to be hidden. This choice is possible for characters, animals or robots in buildings, gullies, field fortifications, directly behind walls, or just over the crest of a hill. Vehicles can choose to be hidden if directly behind hillcrests or stationary in buildings.

The decision to be hidden is made at the beginning of a unit's turn and applies until the next combat round. Hiding units may not be spotted; if already spotted they remain spotted as long as they do not move - hiding units may not spot, fire or perform any other activities requiring observation of the area; they are "keeping their heads down."

Spotting Concealed Units: Units which have not been spotted by the enemy may be kept off the playing surface; their positions (and movements) should be recorded for later verification if a dispute arises. This may be done on a small map of the area, with written descriptions or by using small cards or markers on the playing surface in place of the unit. In the last case, also use several dummy markers to confuse the enemy.

To spot a concealed unit:

Difficult, Recon, 1 combat round (absolute).

Referee: Make one roll for each concealed unit, applying the best Recon skill from among any of the opposing units with a potential line of sight to the concealed unit.

Decrease the difficulty of this task by one level if:

- The concealed unit is moving (a pop-up doesn't count as movement in this case);
- The concealed unit fired a high-signature weapon. In darkness, this applies to a moderate signature as well.

Increase the difficulty of this task by one level if:

- The concealed unit is camouflaged;
- The range from the potential spotting unit(s) to the concealed unit is beyond Very Long range. Decrease this to medium range for partial darkness, and to short range for total darkness.
- For darkness, increase the difficulty of all spotting tasks by one level.

LINE OF SIGHT: SMOKE

Line of sight terminates upon encountering a smoke screen.

Some weapons are listed as having a smoke round available. All such rounds have a specific screen length given in the weapons table.

On the combat round of impact, one marker is placed on the playing surface in the square of impact. On the next combat round, a second marker is placed in a square adjacent to and downwind of the first marker (use the scatter procedure if the wind direction is unknown).

Once the screen has reached its screen length, the round ceases to generate smoke and the screen begins to dissipate. On the next combat round, remove one marker from the upwind end of the screen. On the next combat round, remove another marker, and so on. Continue this procedure until the smoke screen is gone.

Fire: Brush fires and structural fires both produce smoke. In both cases, the length of the smoke screen is 50 meters.

As with a smoke round, one smoke marker is added to the screen downwind of the fire each turn until the maximum length is reached. Unlike a smoke round, the screen is not removed after it reaches its maximum length, but rather remains in place until the fire stops burning.

Page 90, Explosive Decompression and Vacc Suits (correction): The task for applying patches to breached Vacc Suits, Battle Dress or Combat Armor should be:

To apply a patch to breached vacc suits, battle dress or combat armor:

Routine, Vacc Suit or Battle Dress, Dex, 2 sec.

Referee: Since a combat round is only six seconds long, be sure to roll for the time duration (it could take more than one combat round to get the suit patched). The suit occupant may try this task if still conscious (however, see Panic, below).

If the suit has not been patched after the first combat round, apply one hit point of damage per round to the suit occupant until the suit is patched. Do not apply any damage on the round the suit is patched.

Panic (optional): When a breach occurs, have the suit occupant first roll a determination task to keep from panicking. If able to avoid panicking, the suit occupant can try to patch his own breached suit.

Page 93, Effects of Fire, left column (correction): References to other rules sections are incorrect; the reference "(see damage to buildings for how..." should read "(see Damage to Structures for how...". The next paragraph states "See the rules for smoke"; this should actually read "See the rules for Smoke Screens".

Page 93, Armor Values, right column (correction): The values for starships are incorrect. The correct values are: Starship Interior Bulkhead, 30; Starship Exterior Hull, 40.

Page 94, Demolishing Structures (correction): The reference "Demolition charges demolish buildings as explained in structure damage" should read "Demolition charges demolish buildings as explained above (see Damage to Structures)".

Page 94, Breaches (correction): In the second sentence, remove the phrase "and is in communication with in diameter".

Page 97, Psionic Talents Table (correction): The correct talent is Telepathy, not Telempathy (which is an ability under Telepathy).

Page 99, Clairvoyance, Direction (correction): The task for performing a clairvoyant Direction is incorrect:

To perform a clairvoyant Direction:

Simple, Clairvoyance, Int.

Referee: The Psi strength cost is 0 + range.

Page 99, Telekinesis, task definitions (clarification): The multiple tasks given for performing telekinetic tasks can be simplified into a single task, as shown below:

To perform telekinesis on an object:

[difficulty], Telekinesis, Int, 6 sec.

Referee: The difficulty and Psi cost of the task depends on the mass being manipulated; consult the table below:

<i>Mass</i>	<i>Difficulty</i>	<i>Psi Cost</i>
< 10g	Simple	1 + range
< 100g	Simple	2 + range
< 1kg	Routine	3 + range
< 10kg	Routine	5 + range
< 100kg	Difficult	8 + range
< 1,000kg	Formidable	10 + range

If a mishap occurs, the object being manipulated is somehow damaged.

Page 101, Teleportation, left column (deletion): The last two paragraphs before the task definitions should be deleted. These paragraphs are the ones starting with "Teleportation calls for the range cost, as indicated on the table..." and ending with "...or weapons is a level 5 skill".

Page 101, Teleportation, task definitions (clarification): The multiple tasks given for performing teleportation tasks can be simplified into a single task, as shown below:

To teleport one's self:

[difficulty], Teleportation, Int, 6 sec.

Referee: The Psi cost is 0 + range. The difficulty of the task depends on what the teleporter is carrying; consult the table below:

<i>Difficulty</i>	Items carried
Routine	Self without clothes.
Difficult	Self with clothes (weapons or objects up to 1 kg, if worn as part of an individual's clothing, holstered or sheathed).
Formidable	Self with clothes and equipment (maximum load cannot exceed Strength×1 in kg).

Jumps at very distant range involve disorientation for a period of 20 to 120 seconds. Jumps at distant range or beyond are hazardous; if a mishap occurs, the character will stumble or fall upon arrival.

TAS FORM 2, Homeworld Summary, Starport column (correction): Starport D/F should be C/F.

TAS FORM 2, Homeworld Summary, Law Level column (correction): Add a block below "High" labeled "Extreme."

REFEREE'S MANUAL (0212, 1987)

The following corrections apply to the **Referee's Manual**.

Page 11, 13, right column, Universal Task Profile Format (correction): The sample task is incorrect. The correct task should be:

To diagnose damage done to an air/raft:

Routine, Gravitics, Grav Vehicle, 15 min (uncertain)

Page 13, left column, Fateful Tasks (correction): The last paragraph should read as follows:

On a fateful task, if failure occurs, roll 2D on the Mishap Table. If the task is listed as fateful and hazardous, roll 3D on the Mishap Table.

Page 15, right column, General Damage and Repair Table (clarification): Repairs made to a starship outside of a shipyard (see page 96, Damage Control and Repair, last paragraph), should be considered "in the field".

Page 16, left column, Basic and Enhanced Generation (correction): This section should be named "Basic and Extended Generation".

Page 16, Universal World Profile Diagram (correction): The Gas Giants and Planetoid Belts labels have been switched. Planetoid Belts should be first, then Gas Giants. In the example shown, Roup has 2 Planetoid Belts and 3 Gas Giants.

Page 20, Mainworld Determination After the Fact, Atmosphere, Tainted Atmosphere (correction): The first sentence should read, "The atmosphere contains an unusual taint such as disease, a hazardous gas mix..."

Page 22, World Size (correction and omission): Column headings should be: General Description, Min Diameter, Max Diameter. The Minimum Diameter for small gas giants is 20,000 km; for large gas giants, 60,000 km. The Maximum Diameter for small gas giants is 59,999 km; for large gas giants, 120,000 km.

Page 22, World Atmosphere (correction): Column headings should be: General Description, Min Pressure, Max Pressure.

Page 22, World Law Level (correction): Code 6 should have a description of "Moderate law (all firearms except shotguns prohibited).

Page 23, World Physical Data, Code Hydrographics (correction): Second entry Desert (code 1) should be Dry World; fourth entry Dry World (code 3) should be Wet World.

Page 24, Step 6, Hydrographics (correction): The Hydrographics formula should be 2D-7+Atmosphere, rather than 2D-7+World Size.

Page 24, Step 10, Technology Level, Technology Die Modifiers (omission): The modifier for Governments E and F should be -1. The modifier for Starport F should be +1. The modifier for Atmosphere F should be +1.

Page 25, Step 12, Trade Classifications (correction): Fl line should be Size "—", Atmos A-C, Hydro 1+. Lo line should be Population 1-3. Ni line should be Population 1-6. Po line should be Atmos 2-5, Hydro 0-3, Pop 1+. The sentence "Aslan worlds are Rich (Ri) without regard..." should read "Aslan worlds ignore Government type for determining Rich (Ri) worlds."

Page 25, Step 14, Population Multiplier (omission): Missing explanation should be “The population multiplier is applied as a multiplier against the Minimum Population of a world to determine total population”.

Page 25, Step 16, Planetoid Belts (correction and omission): A result of “7” should indicate a quantity of 2; a result of “12” should indicate a quantity of 3; remove the “13” result. If there are gas giants in the system, apply the number of gas giants as a +DM to the die roll to determine if planetoid belts exist in the system.

Page 26, Step 3, System Nature (omission): Use DM –1 when returning to this table for a far companion.

Page 26, Step 4, Primary Star Type and Size (correction and addition): Change the Type result for a 10 to “G”. Change all occurrences of star sizes VI and D to V. The modifier if a mainworld has already been created, and Atmosphere 4-9 or Population 8+ should be +5. Type M stars may never be class IV; treat all results of class IV as class V.

Page 26, Step 5, Decimal Classification (correction and addition): Replace this entire section with the following:

Determine the specific decimal classification of the star (ranging from 0 to 9).

1. Roll 2D-2 (for a result from 0 to 10); ignore and reroll a result of 10.
2. Add the single digit produced to the star type letter. For example, if the digit produced was 3, and the star type generated was G, the star type becomes G3.

3. Star types K5 to M9 are not available with star size IV; change star size to V.

4. Star types M4V through M9V cannot have habitable worlds: subtract 6 from the decimal classification for primary stars.

5. Star types A, F and G are extremely rare with star sizes II and III: change star size to V.

Page 26, Step 6, Companion Star Type and Size (correction and addition): Note that because any roll for either Type or Size will have a modifier of at least +2 from the primary star, the table needs to be modified for results with a die roll of 4 through 14. Change all occurrences of star size VI to V. Unless the primary star is II, III, or IV, change all “D” results to star size V.

Page 26, Step 7, Companion Orbit (correction and clarification): Rather than determining the companion star’s orbit distance in AU (steps 8 and 9), Change the Far result to “Far (13+1D)” to determine the companion star’s orbit number (see the Orbital Distances Table, below). This also eliminates steps 8 and 9.

Page 26, Step 10, Additional Stars (addition): When returning to step 3 from step 10, apply DM -1 to the die roll on the System Nature Table. If two or more stars in the same system are size D, change them all to size V.

Page 26, Step 11, Maximum Orbits (clarification): The resulting number is the highest orbit number.

Page 27, Step 13, Orbit Zones (clarification): Note: The columns for decimal classification define the break points in the decimal series. The column for decimal 0 is used for decimals 0-4 and the column for decimal 5 is used for decimals 5-9. Where there is a separate column for M9, the M5 column is used for M5-8, and the M9 column is used for M9 only.

Page 27, Step 15, Orbit Zones for Star Size Ib (correction): Orbit 11 for K5 and M0 star types should be “H”; orbit 11 for M5 and M9 star types should be “I”.

Page 27, right column, Orbit Zones for Star Size III, IV, and V (correction): Remove the entries from all three tables for star types B0 and B5.

Page 27, Step 20, Orbit Zones for Star Size VI (correction): Since existing errata has removed Star Size VI from the Primary and Companion Star tables, this table can also be removed.

Page 27, Step 21, Orbit Zones for Star Size D (omission): Size D stars have no decimal classification. There are a large number of published sectors that do have decimal classifications assigned to size D stars. There is no need to delete these, only to remember that the decimal classifications are irrelevant: a M1D or a M8D star are both “DM” on the Orbit Zone table.

Page 28, Step 22, Gas Giants (correction): Should be labeled Gas Giants, not Empty Orbits.

Page 28, Step 23, Planetoid Belts (omission): If there are gas giants in the system, apply the number of gas giants as a +DM to the die roll to determine if planetoid belts exist in the system.

Page 28, Step 24, Empty Orbits (correction): If empty orbits exist, DM +1 if star type A or B.

Page 28, Step 25, Captured Planets (correction): A result of 3 should indicate a quantity of 1; a result of 5 should indicate a quantity of 2.

Page 28, Step 32, Hydrographics (correction): The Hydrographics formula should be $2D-7+Atmosphere$, rather than $2D-7+Size$.

Page 28, Step 33, Population (omission): Maximum population is Mainworld population –1.

Page 28, Step 35, Satellite Size (correction): For Worlds, satellite size formula should be World Size – 1D.

Page 29, Step 41, Subordinate Government (correction): The result for a roll of 4 should be “Self-Perpetuating Oligarchy”, not “Self-Perpetuating Democracy”.

Page 29, Step 43, Facilities, Military Base (omission): DM +2 if subordinate world Atmosphere is same as mainworld Atmosphere.

Page 29, Step 46, Orbital Distances (omission): The Orbital Distances Table is used to convert between orbit numbers, AUs, and kilometers. Note: In some printings, this table is mistakenly labeled “Subordinate Spaceport”.

ORBITAL DISTANCES

<i>Orbit</i>	<i>AUs</i>	<i>Million Kilometers</i>
0	0.2	29.9
1	0.4	59.8
2	0.7	104.7
3	1.0	149.6
4	1.6	239.3
5	2.8	418.9
6	5.2	777.9
7	10.0	1495.9
8	19.6	2932.0
9	38.8	5804.0
10	77.2	11,548.0
11	154.0	23,038.0
12	307.6	46,016.0
13	614.8	91,972.0
14	1229.2	183,885.0
15	2548.0	367,711.0
16	4915.6	735,363.0
17	9830.8	1,470,666.0
18	19,661.2	2,941,274.0
19	39,322.0	5,882,488.0

Page 30, Animal Weaponry (addition): Nowhere is the “to hit” task for an animal given. In hand-to-hand combat, use the “to hit” task on p. 69 of the **Players’ Manual**, with the following modifications:

To determine an animal’s Strength DM, add the two “Hits” numbers together from the animal encounter information, and divide by 5 (drop fractions). For the Dexterity DM, use the animal’s speed directly. Then resolve the encounter using the standard tasks.

Page 34, Step 1, World Size and Atmosphere (correction): The Basic World Data Atmosphere column is incorrect. Correct values for this column are:

<i>UWP</i>	<i>Atmosphere</i>
0	Vacuum
1	Vacuum
2	Vacuum
3	Vacuum
4	Thin
5	Thin
6	Standard
7	Standard
8	Dense
9	Dense
A+	Exotic

Page 34, Step 3, Animal Type and Weight DM (correction): The entries for Depths and Bottom have incorrect DMs. The Basic World Data Atmosphere column is incorrect. Correct values are:

<i>Terrain</i>	<i>Equivalent</i>	<i>Type DM</i>	<i>Wt DM</i>
Depths	Ocean, Sea	+2	+4
Bottom	Ocean, Sea	-4	—

Page 34, Step 5, Animal Type and Quantity (correction): Some entries are missing instructions for quantity: Under Herbivore, die roll 5 should be Intermittent (1D), and under Scavenger, die roll 8 should be Reducer (3D), and die roll 10 should be Intimidator (2D).

Page 35, Step 7, Animal Weight Effects (correction): Hits is a two number figure separated by a “/”; the formula for the second number can be found in the “Wound” column, which should not be there.

Page 35, Step 10, Animal Behavior (correction): Animal Behaviors, Omnivore column headings should be To Attack, To Flee, Typical Speed. These apply to Omnivores, Carnivores, and Scavengers.

Page 42, Step 8, Legal Encounter (addition): If legal encounter, go to step 10d.

Page 42, Step 9, Random Encounters (addition): If random, go to step 10d.

Page 43, Step 10d, Encounter Range (addition): After determining encounter range, if the Encounter includes an NPC, go to step 11.

Page 45, left column, Interpersonal Bribery (correction): Soc 2 should be Soc×Soc (that is, Social Standing squared).

Page 47, Estimating the Sales Price (omission): No task is given in the flowcharts for estimation. The task is defined in the **Player's Manual** errata for the Trader skill above.

Page 50, Step 4, Passengers (clarification): The column on the table labeled "World Digit" should read "Pop Digit", since the table is already labeled "Available at Sourceworld".

Page 50, Step 5, Freight and Cargo (correction and clarification): The sentence "If the goods are cargo (carried for a fee of Cr 1,000 per ton..." should read "If the goods are *freight* (carried for a fee of Cr 1,000 per ton..."

Lot Size: *Major Cargos:* 1D×10. *Minor Cargos:* 1D×5. *Incidental Cargos:* 1D. Lot size is stated in displacement tons. To convert to kiloliters, multiply by 13.5.

From the note under Step 3, Freight and Cargo are determined separately in Step 5.

Page 50, Step 6, Sourceworld Trade Classifications (correction): Fl line should be Size "—", Atmos A-C, Hydro 1+. Lo line should be Pop 1-3. Ni line should be Pop 1-6. Va line should be Size 1+, Atmos 0. The sentence "Aslan worlds are Rich (Ri) without regard..." should read "Aslan worlds ignore Government type for determining Rich (Ri) worlds."

Page 51, Step 9, Nature of Cargo and Freight (omission): For worlds which have no Trade Classifications, use table 9f.

Page 52, Step 10a, Natural Resources (correction): Trade Good 66 should be "Rare Animals (living)".

Page 53, left column, Step 5, Negotiation (addition): Add to Negotiation: Passive Uncooperation, +1000; Active Uncooperation, goods withdrawn from sale. This adds some detrimental effects to negotiation (the cargo purchaser's inability to drive a hard bargain).

Page 53, right column, Step 1, Cargo Price (addition): Selling a speculative cargo should no longer be automatic. Before using Step 1, Cargo Price, the seller must first find a buyer. To do this, use the following task:

To find a buyer for speculative cargo:

[difficulty], Broker, Admin or Streetwise, [varies]

[High Pop (9+) = Simple, 4 hours]; [Mod Pop (4+) = Routine, 1 day]; [Lo Pop (3-) = Difficult, 2 days]

Referee: For manufactured hardware, increase the difficulty level by one for each difference in the tech code (Early Stellar to Average Stellar is a difference of one, and so on). For novelty items, decrease the task difficulty one level for each difference in tech code.

If the world's Law Level is Low Law or less (3-), a fumble results in an automatic 3D mishap. At High Law, (8+), make the task hazardous (2D mishap), and at Extreme Law (A+), make the task hazardous and fateful (3D mishap).

In most cases, do not allow the difficulty to be increased beyond Formidable, unless the world has a Population of 0 (0-9 inhabitants).

Page 53, right column, Step 3, Tech Level Effects (clarification): The price formula for cargo should be calculated as:

$P = p + [p \times (St - Dt)]$, where:

P = final price

p = adjusted price so far

St = source world TL ×0.10

Dt = destination world TL ×0.10

Page 53, right column, Step 3, Tech Level Effects (addition): If the item being sold is:

- A natural resource, ignore the tech level effects.
- A processed resource, use the tech level effects as given.
- Manufactured hardware, always use tech level difference as a minus (-).
- Manufactured non-hardware, use the tech level effects as given.
- Information, use the tech level effects as given.
- Novelty, always use the tech level difference as a plus (+).

Page 54, Actual Value Table (correction): A roll of "11" should have a percentage of "150 percent"; the "130 percent" value should not appear twice on the table.

Page 58, right column, Locomotion Section (correction and addition): The following definitions apply to locomotion:

Suspension: What a craft “sits” on (rests on when grounded and stationary) and is propelled by. All craft that require locomotion require a suspension, which is what is installed in the chassis.

Transmission: The machinery used to transfer power from a craft’s power plant to the craft’s suspension. All craft that use contact-based locomotion require a transmission, which is generally installed in the chassis. Legged craft and ordinary legged robots can have their transmission installed externally (which also adds to their overall volume). Contoured and pseudo-biological legged robots must have their transmissions installed internally in their legs and chassis.

Suspensions use power from the power plant to propel the craft. Transmissions merely provide the linkages between the power plant and their corresponding contact-based suspensions; they do not use power themselves.

Page 58, right column, Locomotion Section, Contact-Based (clarification and addition): The following clarifications will make the design of contact-based locomotion easier:

Legs (Ordinary Robots): Suspension: Each leg requires 5% of chassis volume; 8 or more legs always require 40% of the chassis volume. Transmission: One unit of transmission is required for each kilowatt of power plant output. The transmission volume is external to the chassis volume; divide the transmission volume by the number of legs, to determine the transmission volume for each individual leg.

Legs (Contoured and Pseudo-Biological Robots): Suspension: Each leg requires between 10% and 20% of chassis volume, with 15% as the average size. Transmission: One unit of transmission is required for each kilowatt of power plant output. The transmission volume is internal to the chassis volume; divide the transmission volume by 2 to determine the transmission volume for each individual leg.

Page 59, left column, Jump Drive (correction): The sentence “...in parsecs (3.27 light-years)” should read “...in parsecs (3.26 light-years).”

Page 60, left column, Controls and Bridge Section (clarifications): There is no need to install basic life-support or extended life-support in the ship’s fuel tanks. If you do install grav plates and/or inertial compensators, you need to install them in the entire hull volume. You need to install basic environment in the entire hull volume as well, including the fuel tanks. You need something to keep the fuel load at a constant temperature—plus when inspecting empty fuel tanks, lighting is a tremendous help.

Page 60, left column, Controls and Bridge Section, Panel Add-ons (clarification): Panel add-ons can be installed to augment a craft’s control panel needs. The power and volume requirements of an add-on are usually superior to that of straight control panel units for a given CP value. In all cases, a control panel add-on can act as a direct replacement for weaker control panel units.

However, as a rule of thumb, do not install any more control panel add-ons than you expect to have crewmembers. It is a bit ridiculous to install 10 large holodisplays when you only expect to have one crewmember.

Also, holodynamic linked and holographic linked panel units refer to the same type of panel unit.

Page 60, right column, Accommodations Section, Staterooms (correction and clarification): Ignore the values listed for dual occupancy staterooms; use the values in the Extended Accommodations table on page 82.

The small stateroom as given in the Accommodations table is a “bare-bones” accommodation for one person—little more than a bed and a fresher. The “full” stateroom is a more deluxe accommodation, with a mini-kitchen, mini-lounge (table and nice couch or chairs), and so on. Thus the significant price difference. Notice that a half-stateroom does not equal a small stateroom. The two are different, which is intentional. The small stateroom equates to the small craft stateroom in *High Guard*.

When allocating staterooms to a design, mix and match the two stateroom types to get whatever level of accommodation luxury you are designing. If you run into problems with the full stateroom approach, consider double occupancy for the low-ranking crewmembers. If on a really low budget, consider a small stateroom, but remember that two small staterooms require more power than one stateroom with double occupancy. As a last resort, double occupancy in a small stateroom can be used to solve problems; simply assume that the two crew members work on different shifts.

Page 61, Construction Times (clarification and addition): Time required for construction varies by ship tonnage, according to the Construction Times table. For tonnages other than those given on the table, the referee should round to the nearest quantity or interpolate. Construction times are given in weeks. For simplicity, a ship is not usable for any purpose until it is completed.

CONSTRUCTION TIMES	
<i>Tons</i>	<i>Weeks</i>
0—50	24
51—80	32
81—100	40
101—200	48
201—400	64
401—600	96
601—800	112
801—1,000	120
1,001—5,000	144
5,001—10,000	160
10,001—20,000	174
20,001—50,000	192
51,001—100,000	208
100,001—200,000	224
200,001—500,000	232
500,001—1,000,000	240

A number of factors may speed up construction; these are expressed in terms of the extra percentage of a week's work that can be finished in one week. For example, if rate increases totaling 30 percent apply, then 130 percent of a week's work will be done that week, counting as 1.3 weeks off the construction time. The largest possible increase is 100 percent, or two weeks' work done in one week. There are three factors capable of speeding construction. These are:

1. If the ship is not the first ship built in its class (i.e., it satisfies the requirements to cost only 80 percent of its face value): +25 percent.
2. If double the ship's tonnage in yard capacity is assigned to it during the week (extra workers and equipment): +40 percent.
3. For every extra 10 percent of the unmodified weekly construction cost (see below) that is paid: +10 percent.

Construction is paid for every week. To find the unmodified weekly cost, divide the total ship cost by the construction time given on the table. After all time modifiers have been determined each week, multiply the weekly cost by the work done; for example, if 1.3 weeks' worth of construction have been done, pay 1.3 times the unmodified weekly cost. Speed-up payments (as in 3 above) are in addition to the weekly cost.

Page 61, Refitting Ships (addition): Outmoded ships may be improved by refitting; obsolete systems are replaced by newer models. All refitting must be done at an A or B starport, and jump-drives may be refitted only at A starports. Refitting involves the complete removal of an old system and the installation of a new one; for instance, if a power plant is refitted, the entire power plant is removed and a new one put in its place. Refitting takes up shipyard capacity equal to the refitting ship's tonnage.

Changes in power plant, maneuver drive, or jump drive are major changes. They cost 1.5 times the amount the new system would cost in a new ship; the time required to install major changes is one fourth the time required to build a new ship (from the construction time table).

Changes in any other ship component are minor changes. They cost 1.1 times the cost of the system in a new ship and take one tenth the time required for new ship construction.

Refitting is subject to the same time modifiers and weekly costs as in the shipbuilding rule. If several ships of a class are being refitted the same way, all ships after the first receive the time benefit. Work may proceed concurrently: if several ship systems are being replaced, the refit takes only the time required for the longest one.

The degree to which a ship may be changed is limited. Power plant, M-drive, J-drive, and spinal mount weapons may not be increased in tonnage. There may be no additional launch facilities built (although they may be removed). Armor and configuration may not be changed. The number and size of weapons bays may not be changed.

Page 62, Hull Design (clarification): To determine the values for a non-standard hull size, just extrapolate the values from the *closest* hull size using the following formula to determine the modification factor:

$F = N \div B$, where:

F = the factor to apply to the base hull value, and

N = the desired non-standard hull size, and

B = the closest standard hull size to use as a base.

For example, if a 440 UCP hull size is desired, simply multiply the values for a 400 UCP hull by a factor of 1.1 (440/400). If, on the other hand, a 460 UCP hull is desired, then multiply the values for a 500 UCP hull by a factor of 0.92 (460/500).

Page 62, Step 2, Select Vehicle Chassis (correction): In the Vehicle Chassis Table, UCP 0.050 should be 0.500; UCP 0.075 should be 0.750. The weight entry for UCP 0.037 is incorrect. It should be 0.050, not 0.075.

Page 62, Step 3, Select Small Craft Hull (correction): The price column is in thousands of credits on the Small Craft Hull Table.

Page 62, Step 4, Select Space Vessel Hull (correction): For UCP 75000, volume should be 1012500.

Page 63, Step 5, Craft Configuration and Streamlining (corrections and clarifications): Configuration 1 should be labeled Needle/Wedge. The Airframe column for Configuration 6, Dome/Disk should be $\times 3.0$, not $\times 0.5$. The Price Mod column for Configuration 7, Irregular should be $\times 0.5$, not $\times 0.05$.

Here are the definitions for the various streamlined configurations:

Unstreamlined: No attempt has been made to streamline the hull. Many protrusions and irregularities exist which significantly increase the vessel's drag, making it difficult or impossible to operate the craft in an atmosphere at any high rate of speed. Unstreamlined craft cannot land on a world with an atmosphere of 2 or greater, and cannot skim gas giants for fuel.

Streamlined: Various cowlings and fairings have been added to the hull to streamline it for operation in an atmosphere, although the streamlining is less than that provided by an airframe. Without power, a streamlined craft drops like a rock.

Airframe: The hull has been designed for high performance in an atmosphere; an airframe generates its own lift in an atmosphere. An airframe craft can glide to a landing without power if necessary. In order to achieve such performance, exterior design has been a priority.

Page 63, Step 6, Planetoid Configurations (clarification): The armor value mass factor is in fact the armor value *mod* (refers to the Mod column on the Armor Table in Step 9).

Page 63, Step 11, Open Vehicle? (correction): The second and third sentences should read: If the vehicle has a chassis UCP of 0.2 or less, it cannot be enclosed; occupants must ride on its outside. If the chassis UCP is more than 0.2, the vehicle is enclosed unless selected otherwise.

Page 64, Step 1, Power Supply (corrections and clarifications): The table heading is misleading. Power Out, Weight and Price are per kiloliter of volume; Power Out, Weight, Price, and KI/Hour columns of each table entry are for 1 kiloliter of power plant volume. The KI/Hour column then represents the fuel consumption rate in kl/hour for 1 kiloliter of power plant volume. The Volume column should be labeled Minimum Volume, the smallest volume to which the described power plant may be built.

TL 6 Nuclear Fission: The consumption of radioactives is given per month, not per hour.

TL 12 Fusion Power Plant: KI/Hour entry should be 0.003, not 0.005.

TL 13-14 Fusion Power Plant: KI/Hour entry should be 0.0045, not 0.005.

TL 17 Antimatter Power Plant: KI/Year entry should be 250.0, not 25.0.

Further testing of vehicle designs using the hydrocarbon fueled power plants has revealed that they are too inefficient as given. More acceptable values are given below:

TL	Description	— Per Kiloliter of Power Plant Volume —				Minimum Volume	Fuel Type
		Power Out	Weight	Price	KI/Hour		
5	Internal Combustion	0.25	1	1000	0.030	0.005	Hydrocarbons
6	Improved Internal Comb	0.40	1	2000	0.025	0.001	Hydrocarbons
7	Gas Turbine	0.60	1	5000	0.040	0.005	Hydrocarbons
8	MHD Turbine	0.80	1	10000	0.035	0.001	Hydrocarbons

Antimatter power plants use fuel pods: a special self-contained fuel package that contains a measured quantity of antimatter enclosed in a strong artificial gravity “bottle”. The bottle’s gravity fields are maintained by an array of superbatteries. Fuel pods are the heart of an antimatter power plant, and they typically provide fuel for up to a year before needing replaced. Fuel pods also have a minimum size to which they may be built:

<i>TL</i>	<i>Min Vol (Kl)</i>
17	2.000
18	0.800
19	0.200
20	0.050
21	0.005

Antimatter power plant output increases dramatically as the ability to safely contain a progressively larger annihilation mass occurs. This means that a given fuel pod is “burned up” at a progressively faster rate, however.

Page 64, Step 1, Storage Batteries (correction and addition): Divide the cost of all batteries by 100.

Page 64, Step 1, Fuel Cells (correction and clarification): On the Fuel Cells table, the headings for the two rightmost columns should be: *Price* and *Fuel Liters/Hour*. The minimum tech level for the fuel cells shown is TL10.

Page 64, Step 2, Scale Efficiency (correction and clarification): Volume on either table is in kiloliters. On the Small Plants Efficiency Decrease table, the Volume column entry for Turbines is missing. It should be 0.10-.

Improved Internal Combustion plants use the Internal Combustion efficiency entries.

Page 65, Step 3, Jump Units Required (correction and clarification): The Jump-4 entry for a size of 75,000 is incorrect; it should be 3750, not 2750.

The entire table can be reduced to a percentage of the Displacement Tonnage equal to $1 + \text{Desired Jump Number}$, for example, a Jump-3 drive always requires 4% of the ship’s displacement tonnage.

Page 65, Step 4, Jump Fuel Volume (correction): The correct amounts of fuel in kiloliters per jump unit required are 40.5 at TL 18, 13.5 at TL 20, and 6.75 at TL 21.

Page 65, Step 5, Maneuver Drive (clarification): The entire table can be reduced to a percentage of the Displacement Tonnage equal to $3 \times \text{Desired Maneuver in Gs} - 1$; for example, a 4G maneuver drive always requires 11% of the ship’s displacement tonnage.

Page 65, Step 5, Maneuver Drive (explanation): An anti-grav unit requires a gravity well to push against, so an anti-grav maneuver drive is less efficient at 10 diameters and beyond. The effective maneuver number of the craft drops by 50% at 10 diameters and beyond; for example, a maneuver-2 drive drops to a maneuver-1, and a maneuver-1 drops to a maneuver-0.5. Thruster units do not suffer these effects.

Page 66, Steps 6 and 7, Suspension (clarification): Only vehicles require suspensions, not small craft or starships.

Page 66, Step 7, Contact-Based Suspension (correction and addition): The table for contact-based suspensions is incorrect.

CONTACT-BASED SUSPENSIONS

<i>Type</i>	<i>Per kiloliter of suspension</i>			<i>Min Percent</i>
	<i>Power (kW)</i>	<i>Weight (kg)</i>	<i>Price (KCr)</i>	
Wheels	0.02	0.5	12	1.5
Tracks	0.03	1.5	25	2.0
Each Leg	0.04	1.0	35	5/10*

Minimum Percent: The minimum percent of chassis volume required depends on the suspension system. Greater volume reduces ground pressure and thus increases off-road speed.

For Wheels: 1.5 percent.

For Tracks: 2.0 percent.

For Ordinary Legs: 5 percent per leg; 8 or more legs always require 40% of the chassis volume. A minimum of two legs is required.

For Contoured/Pseudo-Biological Legs: 10 percent per leg (15 percent gives average-sized legs; the maximum is 20 percent, giving large legs). Two legs are required.

Contact-based suspensions also require a transmission.

Page 66, Step 8, Contact-Based Transmission (correction and addition): The table for contact-based transmissions is incorrect.

CONTACT-BASED TRANSMISSIONS

TL	Type	Per kW Power Plant Output		
		Volume	Weight	Price
5	Wheels	3.0	3.0	30
6	Wheels	1.0	1.0	15
7	Wheels	0.3	0.3	5
5	Tracks	5.0	5.0	50
6	Tracks	2.0	2.0	25
7	Tracks	0.5	0.5	10
8	Each Leg	8.0	8.0	100
9	Each Leg	2.0	2.0	25
10	Each Leg	0.4	0.4	15

Values shown are the totals for all necessary tracks or wheels, and for each leg (minimum of two required).

Values shown are for one unit of transmissions per kilowatt of power plant output. One unit is required for each kilowatt of power plant output.

Page 66, Step 9, Select Avionics (correction): Avionics table headings should be: Volume, Weight and Power - not Power, Volume and Weight.

The first row should show a TL level of 7-.

Page 67, Step 2, Meson Communicators (correction): Meson communicator, planetary range, TL 20, is given a weight of 0.2; it should be 2.0.

Page 67, Step 4, Laser Communicators (correction): The price note should say: If TL8, x2. The TL 16 column for a Laser Communicator should read: —, —, 0.001, 0.002, 0.004, 0.006, 0.010. The TL 17 column for a Laser Communicator should read: —, —, 0.001, 0.001, 0.003, 0.005, 0.010.

Page 67, Step 5, Maser Communicators (correction): The price note should say: If TL8, x2. The entry for a TL 8 V. Distant Maser Communicator should be 0.032, not 0.32. The TL 16 column for a Maser Communicator should read: —, 0.002, 0.003, 0.004, 0.007, 0.010, 0.040.

Page 68, Step 2, Radio Jammers (correction): The entry for a TL 9 Continental Radio Jammer should be 0.0026, not 0.002. The TL 10 entry on the same line (next column over) should be 0.002, not 0.0026.

Page 68, Step 3, Radars (correction): The prices for Radar should be: Weight xMCr1. All-weather Radar is Weight xMCr1.5.

Page 68, Step 5, Electromagnetic Masking (clarification): An EMM package does not mask the craft's emissions when it uses active EMS. An EMM package does not mask the craft from active EMS scans conducted by other craft.

Page 68, Step 7, Ladar (correction): Weights for TL 10 and 11 regional Ladars should be TL 10, 0.016 and TL 11, 0.008.

Page 68, Radio Direction Finders (omission): Radio Direction Finders were omitted from the **MegaTraveller** rules.

RADIO DIRECTION FINDER

Weight in tons by tech level										
5	6	7	8	9	10	12	14	16	17	
0.5	0.05	0.005	0.003	0.002	0.0015	0.001	0.0007	0.0005	0.0001	

Power Requirement (Mw): Weight in tons. **Price:** Weight in tons; if TL 5, x3; if TL 6, x2. **Volume (kl):** Weight in tons x2.

Page 69, Step 11, Neutrino Sensors (correction): The minimum magnitude for TL 20 should be 0.1 kW.

Page 70, Step 15, EMS Active Array (correction): The power requirement for the EMS Active Array should be: Weight in tons x10.

Page 70, Step 16, EMS Passive Array (correction): There should be no entry for TL 13, and all other TLs should be shifted one place left, to match the EMS Active Array table in Step 15.

Page 71, Step 2, Particle Accelerator Table (correction): The following corrections are needed to the Particle Accelerator Table:

UCP	TL	Power	Volume	Weight	MCr	Hardpoints
H	15	175000	35000	8000	500	25
P	15	225000	35000	8500	800	25
X	17	300000	35000	8500	1000	25

Page 71, Step 3, Meson Gun Table (correction): There are several corrections on the Meson Guns table:

MESON GUNS (SPINAL MOUNT)

UCP	TL	Power	Volume	Weight	MCr	Hardpoints
A	11	125000	65000	13000	10000	50
B	11	150000	110000	22000	12000	80
C	12	150000	25000	5000	3000	20
D	12	175000	65000	12500	5000	50
E	13	175000	15000	3000	800	10
F	13	200000	25000	4500	1000	20
G	14	200000	15000	3000	400	10
H	14	225000	25000	4500	600	20
J	15	225000	15000	3000	400	10
K	12	250000	110000	20000	10000	80
L	13	250000	65000	12500	3000	50
M	14	250000	55000	11000	800	40
N	15	250000	25000	4000	600	20
P	13	275000	110000	19000	5000	80
Q	14	275000	95000	19000	1000	70
R	15	275000	65000	12000	800	50
S	14	300000	110000	19000	2000	80
T	15	300000	95000	18000	1000	70
U	16	325000	110000	18500	2000	80
V	17	325000	95000	17500	1200	70
W	18	325000	65000	11500	1000	50
X	17	350000	110000	18000	2000	80
Y	18	350000	95000	17000	1200	70
Z	19	375000	65000	11000	800	50

Page 72, Step 6, Bays (correction): Bay hardpoints are 10, not 100.

Page 72, Step 7, 100-ton Missile Bays (addition): The 100-ton missile bays stop at UCP factor 9, while 50-ton missile bays go all the way to UCP factor C. The correctly extended 100-ton missile bay entry is:

100-Ton Bay Weaponry TL of the weapon

Type	Pwr	Wgt	MCr	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Missile	5	50	20	7	7	7	8	8	9	9	A	A	B	B	C	C	D	D

Page 72, Step 8, 50-Ton Bay Weaponry (correction): TL 9 should be empty for the Plasma Gun, Fusion Gun, and Repulsor. Prices are missing: Plasma Gun, MCr5; Fusion Gun, MCr8; and Repulsor, MCr6. The Plasma and Fusion Gun bays are incorrect. They should be listed as:

50-Ton Bay Weaponry TL of the weapon

Type	Pwr	Wgt	MCr	10	11	12	13	14	15	16	17	18	19	20	21
Plasma Gun	2,500	35	5	4	5	6	—	—	—	—	—	—	—	—	—
Fusion Gun	5,000	35	8	—	—	7	8	9	A	B	C	D	E	F	—

Page 73, Step 9, Turrets, Mixed Weaponry (clarification): The craft design tables for turrets on pages 73 and 74 list the values for one weapon of the type installed in the turret. If you want to create a turret with mixed weapons, simply select the single weapons you want.

Page 73, Step 10, Missile Turrets (clarification): Replace the printed text with the following paragraph: "A missile turret has a volume of 13.5 kiloliters. Each turret can have 1, 2, or 3 weapons (missile launchers). The listed Power, Weight, and Price are for one weapon. Total the weapons purchased to determine the UCP factor for the turret(s). For example, ten turrets with three Tech Level 7 missile launchers each (for a total of 30 missile launchers) will produce a UCP missile factor of 6."

Page 73, Step 11, Laser Turrets (clarification): Replace the printed text with the following paragraph: "A laser turret has a volume of 13.5 kiloliters. Each turret can have 1, 2, or 3 weapons (beam laser or pulse laser, but not both). The listed Power, Weight, and Price are for one weapon. Total the weapons purchased to determine the UCP factor for the turret(s). For example, one turret with three Tech Level 16 beam lasers will produce a UCP laser factor of 5."

Page 73, Step 13, Plasma Gun Turrets (clarification): Replace the printed text with the following paragraph: “Each turret has a volume of 27 kiloliters. Each turret can have one or two weapons (plasma guns). The listed Power, Weight, and Price are for one weapon. Total the weapons purchased to determine the UCP factor for the turret(s). For example, four turrets with one Tech Level 11 plasma gun each (for a total of four plasma guns) will produce a UCP plasma gun factor of 3.”

Page 74, Step 14, Fusion Gun Turrets (clarification): Replace the printed text with the following paragraph: “Each turret has a volume of 27 kiloliters. Each turret can have one or two weapons (fusion guns). The listed Power, Weight, and Price are for one weapon. Total the weapons purchased to determine the UCP factor for the turret(s). For example, one turret with one Tech Level 17 fusion gun will produce a UCP fusion gun factor of 6.”

Also, the Fusion Gun Turrets table is incorrect; a corrected version is presented below:

Fusion Gun Turrets					<i>UCP Factor</i>									
<i>TL</i>	<i>Type</i>	<i>Pwr</i>	<i>Wgt</i>	<i>MCr</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>A</i>
12	Fusion Turret-12	500	5	2	—	—	—	1	4	10	16	20	—	—
14	Fusion Turret-14	500	5	2	—	—	—	—	1	4	10	16	20	—
17	Fusion Turret-17	500	5	2	—	—	—	—	—	1	4	10	16	20

Page 74, Step 15, Sandcaster Turrets (clarification): Replace the printed text with the following paragraph: “Each turret has a volume of 13.5 kiloliters. Each turret can have 1, 2, or 3 weapons (sandcasters). The listed Power, Weight, and Price are for one weapon. Total the weapons purchased to determine the UCP factor for the turret(s). For example, four turrets with two Tech Level 10 sandcasters each (for a total of 8 sandcasters) will produce a UCP sandcaster factor of 6.”

Page 74, Step 16, Disintegrator Turrets (clarification): Replace the printed text with the following paragraph: “Each turret has a volume of 27 kiloliters. Each turret can have one or two weapons (disintegrators). The listed Power, Weight, and Price are for one weapon. Total the weapons purchased to determine the UCP factor for the turret(s). For example, five turrets with two Tech Level 18 disintegrators each (for a total of 10 disintegrators) will produce a UCP disintegrator factor of 3.”

Page 74, Step 17, Rate of Fire (clarification): Rate of fire applies in personal combat, not in space combat. Each space combat round represents 20 minutes of elapsed time—ROF is inconsequential.

Page 74, Step 18, Magazine Requirements (correction and clarification): Missiles and sandcasters have ammunition storage requirements. Volume required is indicated in the table below.

AMMUNITION STORAGE

<i>Type</i>	<i>TL</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
Standard HE	5	0.1	0.05	20,000
Nuclear	7	0.1	0.07	150,000
Antimatter	16	0.1	0.09	200,000
Sandcaster	7	0.1	0.05	400

Each weapon in a turret holds one round of ammunition. 100-ton bays hold 100 rounds; 50-ton bays hold 50 rounds. Each craft should have enough ammunition for at least one round of fire from all such batteries. One round of fire from a battery is called a battery-round.

Magazines: Otherwise empty bays can be designated as additional ammunition storage. Storage should be allocated in battery-rounds. For example, the battery-round for one triple missile turret is 3 missiles; the battery-round for one 100-ton missile bay is 50 missiles (100 missiles / ROF 2); Battery-round for one 50-ton missile bay is 25 missiles (50 missiles / ROF 2). A battery-round for one triple sandcaster turret is 18 canisters (ROF 6).

A empty 100-ton bay used as an ammunition magazine can hold up to 13,500 individual rounds.

Page 75 through 77, CBM Ammunition (omission): CBM ammunition is mentioned but no information is given for usage. Use the following details:

<i>Bore Size</i>	<i>Hit DM</i>
10cm	+1
12cm	+1
14cm	+2
16cm	+3
18cm	+4
20cm	+6
22cm	+8
24cm	+10
30cm	+12

Danger Space: 4x danger space of a HE round of the same Bore Size and TL.

For all targets in the danger space, roll once each for a contact hit and a fragmentation hit.

Contact Penetration: At TL 7, 6; at TL 8+, same as a 4cm HEAP howitzer round of the same TL.

Fragmentation Penetration: one-half the value of Contact Penetration (due to the abundance of submunitions exploding in the danger space).

Damage: same as a 4cm HEAP howitzer round of the same TL.

Page 75 through 77, Indirect Fire Range (clarification): Indirect Fire range lists a range band and a number in parentheses. The number in parentheses is the actual range in kilometers. Where the range band indicates a general range band for “effect”, the exact range in kilometers is much more accurate. We recommend you use either the range band or the exact range in kilometers in a given combat session—don’t use both. Mixing and matching range methods can be confusing.

Page 75, Step 20, Mortar Ranges (correction): The ranges given for mortars are incorrect as stated.

MORTARS

<i>Bore (cm)</i>	<i>Indirect Fire Range</i>
6	Distant (4)
8	Distant (5)
10	V. Distant (6)
12	V. Distant (7)
14	V. Distant (8)
16	V. Distant (9)
18	V. Distant (9)
20	V. Distant (10)
22	V. Distant (10)
24	V. Distant (11)
30	V. Distant (11)

Page 76, Step 21, Howitzer Ranges (correction): The ranges given for Howitzers are incorrect as stated.

HOWITZERS

<i>Bore (cm)</i>	<i>Indirect Fire Range</i>
2	—
4	Distant (2)
6	V. Distant (6)
8	V. Distant (10)
10	V. Distant (13)
12	V. Distant (13)
14	V. Distant (15)
16	V. Distant (17)
18	V. Distant (18)
20	V. Distant (19)
22	V. Distant (20)
24	V. Distant (21)
30	V. Distant (22)

Page 76, Step 21b, Howitzer Ammunition (addition): The costs for the 2cm HE, 4cm HE and 2cm HEAP rounds are missing. They are: 2cm HE, Cr2; 4cm HE, Cr4; 2cm HEAP, Cr3.

Pages 76 and 77, Flechette Penetration (correction): The “Pen” column for flechette rounds should be labeled “Dgr” (for danger space) instead. The penetration for flechette rounds is equal to the HE penetration for the same sized round.

Page 77, Step 22, High Velocity Gun CPR Ranges (correction): The ranges given for High Velocity Guns are incorrect.

**HIGH VELOCITY
GUNS**

<i>Bore (cm)</i>	<i>Indirect Fire Range</i>
2	Distant (2)
4	Distant (5)
6	V. Distant (10)
8	V. Distant (16)
10	V. Distant (20)
12	V. Distant (22)
14	V. Distant (24)
16	V. Distant (28)
18	V. Distant (32)
20	V. Distant (36)
22	V. Distant (45)
24	Regional (60)
30	Regional (70)

Page 77, Step 22b, High Velocity Gun Ammunition (correction): 8cm bore ammunition volume and weight should be 0.014, not 0.14. 2cm bore Illum ammunition price should be —.

The costs for the 2cm HEAP and 4cm HEAP rounds are missing. They are: 2cm HEAP, Cr5; 4cm HEAP, Cr10.

Page 77, Step 23, High Velocity Autocannon Ranges (correction): The ranges given for High Velocity Autocannon are incorrect.

**HIGH VELOCITY
AUTOCANNON**

<i>TL</i>	<i>Direct Fire Range</i>
5	Distant (5)
6	V. Distant (10)
7	V. Distant (16)
8	V. Distant (20)
9	V. Distant (22)
10	V. Distant (24)
11	V. Distant (28)
12	V. Distant (32)
13	V. Distant (36)
14	V. Distant (45)
15	Regional (60)
18	Regional (70)

Page 77, Step 23b, Miscellaneous Slugthrowers (addition): The following tables present more weapon options for craft designs:

MULTIPLE ROCKET LAUNCHERS

<i>TL</i>	<i>Type</i>	<i>Power</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>	<i>Range</i>	<i>Sig</i>	<i>ROF</i>
6	18cm tube MRL-6	0.010	3.600	3.600	5,000	—	—	1
	Short range rocket*	—	0.003	0.001	170	V. Distant (9)	H	
	Medium range rocket*	—	0.004	0.002	340	V. Distant (18)	H	
	Long range rocket*	—	0.005	0.003	510	V. Distant (32)	H	
10	12cm tube Remote MRL-10	0.020	2.000	2.000	5,000	—	—	1
	Short range rocket*	—	0.002	0.001	75	V. Distant (7)	H	
	Medium range rocket*	—	0.003	0.002	150	V. Distant (13)	H	
	Long range rocket*	—	0.004	0.003	225	V. Distant (22)	H	
11	6cm tube Light MRL-11	0.004	0.120	0.006	500	—	—	1
	Short range rocket*	—	0.001	0.001	11	Distant (4)	M	
	Medium range rocket*	—	0.002	0.002	22	V. Dist (6)	M	
	Long range rocket*	—	0.003	0.003	33	V. Dist (10)	M	

*Select HE, HEAP or KEAPER warhead. Treat as a mortar round for determining penetration, damage and danger space.

MISCELLANEOUS SLUG THROWERS

<i>TL</i>	<i>Type</i>	<i>Power</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>	<i>Range</i>	<i>Sig</i>
5	Medium Machinegun-5	—	0.010	0.010	1,500	V. Long	H
	100 round ammo belt	—	0.003	0.003	120		
	ground tripod/pintel mount	—	0.025	0.025	300		
	water cooling jacket	—	0.019	0.019	400		
6	Light Machinegun-6	—	0.006	0.006	1,200	V. Long	H
	100 round ammo belt	—	0.003	0.003	120		
	ground tripod/pintel mount	—	0.010	0.010	250		
6	Heavy Machinegun-6	—	0.015	0.015	3,000	V. Long	H
	100 round ammo belt	—	0.010	0.010	250		
	ground tripod/pintel mount	—	0.040	0.040	400		
	water cooling jacket	—	0.034	0.034	500		
7	5.5mm Gatling Gun-7	0.001	0.070	0.070	12,350	Distant	M
	2,500 round ammo hopper	—	0.031	0.031	2,250		
	ground tripod/pintel mount	—	0.200	0.200	1,250		
7	7mm Gatling Gun-7	0.002	0.100	0.100	15,500	Distant	M
	2,500 round ammo hopper	—	0.062	0.062	3,000		
	ground tripod/pintel mount	—	0.300	0.300	1,500		
8	5.5mm Gatling Gun-8	0.001	0.080	0.080	19,500	Distant	M
	5,000 round ammo hopper	—	0.062	0.062	4,500		
	ground tripod/pintel mount	—	0.250	0.250	1,350		
8	7mm Gatling Gun-8	0.002	0.100	0.100	23,500	Distant	M
	5,000 round ammo hopper	—	0.125	0.125	6,000		
	ground tripod/pintel mount	—	0.300	0.300	1,750		
10	VRF Gauss Gun-10	0.004	2.000	2.000	200,000	V. Distant	L
	30,000 round ammo hopper	—	0.300	0.300	6,000		
	ground tripod/pintel mount	—	4.000	4.000	4,500		

Page 78, Step 24, Mass Driver Guns (Correction): The ranges listed in the table for Mass Driver Guns are incorrect.

MASS DRIVER GUNS

Indirect Fire

<i>TL</i>	<i>Range</i>
8	Distant (5)
8	V. Distant (10)
8	V. Distant (16)
9	V. Distant (22)
9	V. Distant (24)
9	V. Distant (28)
9	V. Distant (32)
10	V. Distant (36)
10	V. Distant (45)
10	Regional (60)
10	Regional (70)

Replace the second paragraph below the table with the following: “Base Rate of Fire for Mass Driver Guns is 60. Rate of Fire may be increased by increasing power output. Doubling power doubles rate of fire. The limit to increased rate of fire is the square of the gun’s Tech Level times 60 (the limit at TL 8 is 3,840; the limit at TL 15 is 13,500).”

Page 78, Step 25, Beam Laser Table (addition): The following table presents additional information about craft-mounted beam laser weapons:

<i>TL</i>	<i>Type</i>	<i>Pwr</i>	<i>Pen/Atten</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Dngr Spc</i>	<i>Sig</i>	<i>ROF</i>
8	Beam Laser	0.5	5/2	4	Dist(2.5)	2	1.5	H	40
		1.0	10/2	5	Dist(5.0)	2	3.0	H	40
		5.0	28/3	10	VDist(25)	2	4.5	H	40
		10.0	36/3	20	VDist(50)	2	15	H	40
		25.0	47/4	50	Rgnl(125)	2	30	H	40
		50.0	55/4	100	Rgnl(250)	2	45	H	40
13	Beam Laser	0.5	6/2	5	Dist(2.5)	2	1.5	L	40
		5.0	30/3	12	VDist(25)	2	4.5	L	40
		25.0	49/4	60	Rgnl(125)	2	30	L	40

Page 78, Step 26, Pulse Laser Table (addition): The following table presents additional information about craft-mounted laser weapons:

<i>TL</i>	<i>Type</i>	<i>Pwr</i>	<i>Pen/Atten</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Dngr Spc</i>	<i>Sig</i>	<i>ROF</i>
8	Pulse Laser	1.0	6/2	4	Dist(2.5)	3	1.5	H	80
		2.0	13/2	5	Dist(5.0)	3	3.0	H	80
		10.0	30/3	10	VDist(25)	3	4.5	H	80
		20.0	38/3	20	VDist(50)	3	15.0	H	80
		50.0	49/4	50	Rgnl(125)	3	30.0	H	80
		100.0	57/4	100	Rgnl(250)	3	45.0	H	80
13	Pulse Laser	1.0	7/2	5	Dist(2.5)	3	1.5	L	80
		10.0	33/3	12	VDist(25)	3	4.5	L	80
		50.0	51/4	60	Rgnl(125)	3	30.0	L	80

Page 78, Step 26, Pulse Laser Guns (correction): The TL 13 laser that uses power of 1.0 has an incorrect volume and weight; the correct value is 0.03, not the 0.30 shown.

Page 78, Step 27, Standard Plasma Gun Table (addition): The following table presents additional information about craft-mounted standard plasma weapons:

<i>TL</i>	<i>Type</i>	<i>Pen/Atten</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Dngr Spc</i>	<i>Sig</i>	<i>ROF</i>
10	Standard Plasma PA-10	44/5	20	VDist(5.1)	2	15	H	40
11	Standard Plasma PA-11	44/5	20	VDist(5.1)	2	15	H	40
11	Standard Plasma PB-11	54/5	20	VDist(7.8)	2	30	H	40
12	Standard Plasma PB-12	54/5	20	VDist(7.8)	2	30	H	40
12	Standard Plasma PC-12	64/5	20	VDist(12)	2	45	H	40
13	Standard Plasma PC-13	64/5	20	VDist(12)	2	45	H	40

Page 78, Step 28, Rapid-Pulse Plasma Gun Table (addition): The following table presents additional information about craft-mounted rapid-pulse plasma weapons:

<i>TL</i>	<i>Type</i>	<i>Pen/Atten</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Dngr Spc</i>	<i>Sig</i>	<i>ROF</i>
12	Rapid Pulse Plasma RPA-12	44/5	20	VDist(5.1)	3	15	H	80
13	Rapid Pulse Plasma RPA-13	44/5	20	VDist(5.1)	4	15	H	160
13	Rapid Pulse Plasma RPB-13	54/5	20	VDist(7.8)	3	30	H	80
14	Rapid Pulse Plasma RPA-14	44/5	20	VDist(5.1)	5	15	H	320
14	Rapid Pulse Plasma RPB-14	54/5	20	VDist(7.8)	4	30	H	160
14	Rapid Pulse Plasma RPC-14	64/5	20	VDist(12)	3	45	H	80
15	Rapid Pulse Plasma RPA-15	44/5	20	VDist(5.1)	6	15	H	640
15	Rapid Pulse Plasma RPB-15	54/5	20	VDist(7.8)	5	30	H	320
15	Rapid Pulse Plasma RPC-15	64/5	20	VDist(12)	4	45	H	160

Page 78, Step 29, Standard Fusion Gun Table (addition): The following table presents additional information about craft-mounted standard fusion weapons:

<i>TL</i>	<i>Type</i>	<i>Pen/Atten</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Dngr Spc</i>	<i>Sig</i>	<i>ROF</i>
12	Standard Fusion FX-12	67/5	30	VDist(18)	2	45	H	40
13	Standard Fusion FX-13	67/5	30	VDist(18)	2	45	H	40
13	Standard Fusion FY-13	71/5	30	VDist(21)	2	45	H	40
14	Standard Fusion FY-14	71/5	30	VDist(21)	2	45	H	40
14	Standard Fusion FZ-14	79/5	30	VDist(30)	2	45	H	40
15	Standard Fusion FZ-15	79/5	30	VDist(30)	2	45	H	40

Page 78, Step 30, Rapid-Pulse Fusion Gun Table (addition): The following table presents additional information about craft-mounted rapid-pulse fusion weapons:

<i>TL</i>	<i>Type</i>	<i>Pen/Atten</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Dngr Spc</i>	<i>Sig</i>	<i>ROF</i>
14	Rapid Pulse Fusion RFX-14	67/5	30	VDist(18)	3	45	H	80
15	Rapid Pulse Fusion RFX-15	67/5	30	VDist(18)	4	45	H	160
15	Rapid Pulse Fusion RFY-15	71/5	30	VDist(21)	3	45	H	80
16	Rapid Pulse Fusion RFX-16	67/5	30	VDist(18)	5	45	H	320
16	Rapid Pulse Fusion RFY-16	71/5	30	VDist(21)	4	45	H	160
16	Rapid Pulse Fusion RFZ-16	79/5	30	VDist(30)	3	45	H	80

Page 79, Step 33, Weapon Mounts (correction): Change the last sentence to read: If a vehicle is open-topped or smaller than a UCP of 0.2, the weapon mount must be Fixed or Open; Turrets or Cupolas are not allowed.

Page 80, Step 2, Nuclear Dampers (correction and clarification): The listed Nuclear Damper price is in MCr. Note the following highlighted corrections for the Nuclear Dampers table.

<i>UCP</i>	<i>Power</i>	<i>Volume</i>	<i>Weight</i>	<i>MCr</i>
2	5000	270	300	40
3	7500	540	590	45

Page 80, Step 3, Meson Screens (correction): The following table represents corrected information about meson screens:

<i>UCP</i>	<i>TL</i>	<i>Power</i>	<i>Volume</i>	<i>Weight</i>	<i>MCr</i>
1	12	0.015	1220	910	80
2	13	0.030	400	300	50
3	13	0.045	610	460	55
4	14	0.060	215	160	40
5	14	0.075	270	230	45
6	14	0.090	325	290	50
7	15	0.105	270	245	40
8	15	0.120	400	360	50
9	15	0.135	540	490	60
A	16	0.150	325	310	50
B	17	0.165	365	340	60
C	18	0.180	435	390	70
D	19	0.195	485	460	80
E	20	0.210	540	560	90
F	21	0.225	595	640	100

The corrected table for optimized Meson Screen Packs is:

<i>UCP</i>	<i>TL</i>	<i>Power</i>	<i>Volume</i>	<i>Weight</i>	<i>MCr</i>
1	16	0.135	108	85	55
1	17	0.100	90	75	23
1	18	0.065	84	65	17
1	19	0.035	65	55	9
1	20	0.015	40	45	4
1	21	0.010	33	40	1

Page 80, Step 4, Black Globes (addition): The energy absorbed by a Black Globe must be stored until it can be released by providing power to the ship's weapons, drives, or other systems. Ships with a jump drive are able to store energy in the drive's capacitors in an amount equal to:

$$\text{Volume of the Ship in Kiloliters} \times \text{Maximum Jump Factor} \times 0.005 \text{ (unit of measure for the result is MW)}$$

Additional capacitors can be installed to provide more storage. Each kiloliter of additional capacitor storage costs MCr 0.3 and can hold 650 MW. These additional capacitors are called energy sinks.

See the section on Starship Combat (page 95) for additional information on disposing power stored in the energy sinks.

Page 80, Step 6, White Globes (clarification): White Globes price is in MCr.

Page 81, Step 1, Environment Controls (correction): Basic Life Support volume and weight is 0.005, not 0.050.

Page 81, Step 2, Control Points (correction and additions): Do not figure control points on hull. When determining control points required by the power supply, ignore storage batteries. Storage batteries require no control points.

Page 81, Step 3, Computers (clarification and correction): Computer prices are in MCr. 9/bis computer should be 9/fib. Max CP input for a 9/fib computer should be 100 million.

The input CP is the maximum control panel input the computer can handle. You cannot connect more control panel CPs to the input side of the computer than listed here. If the control panel output times the computer multiplier does not totally satisfy the control panel needs of the craft in question, the craft will not work correctly.

If its control point (CP) needs are very low, a craft can get by without a computer. The "linked" control panel units have a limited amount of computer intelligence built into them. A control panel unit with a volume of 1 kiloliter involves much more than just the control panel face—the volume includes all the circuitry links necessary to make the control panel work. In fact, very little of the control panel volume is actual "panel". As a rough guide, the maximum number of control panel units that one person can operate and monitor is 12 kiloliters.

Page 81, Step 4, Control Panel Units (clarification): The first sentence "Select and install enough control panel units..." should instead read "Select and install enough control panel units and control panel add-ons..."

If the total number of control points needed is less than 0.05, no control panel units need to be installed.

Page 81, Step 6, Electronic Circuit Protection (clarification): To implement the protecting effects of electronic circuit protection in starship combat, ignore every odd-numbered hit on the computer. So, if the ship has electronic circuit protection, ignore the first computer hit, the third computer hit, the fifth computer hit, and so on.

Page 82, Step 3, Reduced Vehicle Gunners (revision and correction): The formula for reducing vehicle gunners ($X = C \div (S \div W)$) penalizes a design that has increased sensors, which was not what was intended, and the original revision ($X = (C + S) \div W$) encourages designs with more sensors than necessary, which was not what was intended either. The following formula is intended to fix both problems: $X = C \div (W \div S)$.

Page 82, Step 4, Supplanted Vehicle Commander (revision): The formula for determining if a vehicle commander is unnecessary penalizes expensive (and thus higher TL) designs, which was not what was intended. The following formula fixes this problem: $X = (T \div S) \div C$.

Page 82, Step 6, Vehicle Crew Accommodations (clarification): The position with an Access of None is for vehicles with a displacement UCP of 0.2 or less; this represents volume for the seat and leg room of a person riding outside a vehicle, such as on a motorcycle.

On the table, Volume is in kiloliters, Weight is in tons, and Price is in credits.

Page 82, Step 7, Starship and Spacecraft Crews (clarification and addition):

On the Bridge Crew formula (Cb): If Cb as computed above exceeds 10, recompute Cb instead as:

Cb = 10 + ((T ÷ C) ÷ 7500), rounding fractions up.

On the Engineering Crew formula (Ce): L=Locomotion CP.

On the Maintenance Crew formula (Cm), **Cm = (A ÷ C) ÷ 400** (drop fractions), where A=Hull displacement divided by 100.

On the Gunnery Crew formula (Cg): If Cg as computed above exceeds 50, then recompute Cg instead as:

Cg = 50 + (((W + F) ÷ C) ÷ 500), rounding fractions up.

On the Command formula (Cc): If Cc as computed above exceeds 10, recomputed Cc instead as:

Cc = 10 + (Z ÷ 60), dropping fractions.

On the Stewards formula (Cs), **Cs = ((Cc + Ch)/8) + (Cj/50)** (drop fractions), where Cc = Command Crew, Ch = High Passage passengers, and Cj = Middle passage passengers.

On the Frozen Watch formula (Cf): H=Hull displacement divided by 1000 (minimum 1).

On the Medical Crew formula (Cd), **Cd = (Z ÷ 120) + ((Cl + Cf) ÷ 20)** (drop fractions), where Z=Crew and Passengers, Cl=Low Passengers, and Cf=Frozen Watch.

Page 82, Step 8, Crew Segments (correction): Divide the crew into one even segment per 13,500 kiloliters of hull; treat a fractional hull segment as a full segment. For example, the 45-person crew of a 16,200-kiloliter ship divides into 23-person segments.

Page 82, Step 9, Extended Accommodations Table (clarification): A low berth holds one individual, and is essentially a specialized bunk. An emergency low berth holds 4 individuals on a short-term emergency basis only. The volume of all accommodations was doubled from the original volumes given in *High Guard* to allow for access—what good does it do to put in a bunk if you can't get to it?

Page 83, Step 3, Fuel Purification Plant (clarification): The listed price of the fuel purification plants is in credits (Cr).

A good "trick" is to include the fuel purification volume requirement in the fuel per volume requirement, giving us a sort of "fuel capacity rate". To do so, use the following table:

Fuel Consumption Modifiers to Include Fuel Purification

<i>TL</i>	<i>Mod</i>
8	x1.70
9	x1.60
10	x1.55
11	x1.45
12	x1.40
13	x1.35
14	x1.25
15	x1.20
16	x1.15
17	x1.05

Page 85, Fuel Table (correction): To match the Fuel Prices table on page 38, the weight of Radioactives should be changed to 12.5.

Page 86, Top Vacuum Speed (correction and addition): For flying vehicles, especially those that can go outside the atmosphere, top vacuum speed has no real meaning. Other than the speed of light, there really is no such thing as “top speed” in a vacuum. The craft can accelerate as long as it wants, and can attain any speed desired—limited only by its duration and acceleration. Therefore, acceleration in Gs is a more sensible and useful number than top vacuum speed, since it tells you how quickly the craft can *change* its speed. Once you know the craft’s maximum acceleration rate, you can compute the travel time using the basic travel time formula found in the **Referee’s Companion**. Therefore, Top Vacuum Speed should be replaced by MaxAccel in craft profiles.

Top Speed applies to craft operating in a standard atmosphere only. Note that wheeled, tracked, and legged vehicles are subject to the same top speed restrictions as flying craft, based on their streamlining. For example, an unstreamlined wheeled vehicle can never exceed 300 kph in a standard atmosphere. If the wheeled vehicle needs to go faster, it must be streamlined, just as any flying vehicle.

Page 87, Agility (clarification): In the old *High Guard* system, agility was defined as an attribute of maneuver drive—that is, “how effectively can my drive out-maneuver yours.” In the new **MegaTraveller** rules, separating out weight and volume into unique craft attributes made it clear that agility needed to be more precisely defined as its own unique attribute, related to ship mass, not to ship speed.

Under the new rules, agility is defined as the “ability to change your craft’s orientation over time,” which is more a function of ship mass than of ship speed. Under this new definition, it becomes immediately obvious that smaller vessels will tend to have a greater agility than larger vessels. Consider which is faster, the Queen Mary, or a rowboat? Which can change its heading more quickly? The rowboat has the greater agility, even though its “maneuver drive” speed rating is far less than the Queen Mary’s.

Page 87, Active Object Scan (clarification): The table does not show the range to an object; rather, the table shows the range limit (that is, the strength) of the sensor. Since the strength of the sensor is what the table shows, it makes sense that weaker sensors—those with a shorter range—are less sensitive.

Page 87, Active Object Pinpoint (correction): From the context, it is obvious that ladar is being described, not radar. Replace all occurrences of radar or RADAR with ladar or LADAR.

Page 88, left column, Neutrino Sensors (correction): The final entry in the Neutrino Sensors table should be “0.1 kW +10”, not “1kw +10”.

Page 88, Passive Energy Pinpoint Table (correction): The table at the top of the second column on the page is mistakenly labeled as “Passive Energy Scan Ability”, and should instead be labeled “Passive Energy Pinpoint Ability”.

Add a row at the bottom of the table with the values “0.1kw, Simple” to match the Neutrino Sensors table.

Page 88, Bearing Table (correction): Change “Over 400,000” to “Over 499,999”.

Page 90, right column, Tactical Pools (addition): Modify the ship tactical pools of each ship according to the following table based on their Control Panel Units (page 81):

<i>TL</i>	<i>Control Panel Type</i>	<i>Modifier</i>
8	Electronic Linked	-2
9	Computer Linked	-1
10	Dynamic Linked	0
13	Holodynamic Linked	+1

Page 91, left column, Surprise (correction): In the referee’s paragraph of the task for determining surprise, change “If any mishap occurs...” to “If exceptional failure occurs...”. Thus if the attacker gets exceptional failure on the surprise task roll, the defender has surprise instead.

Page 91, right column, Step 2, Fight a Round of Combat (clarification): If the tactical pools of both sides are equal, or if neither side has a tactical pool, then determine the side which selects which side acts first based on the following precedence:

1. The side with a single ship, if the other side has multiple craft;
2. The side with the ship with the highest agility;
3. The side with the pilot with the highest Pilot skill;
4. The side with the fewest craft;
5. Roll 1D for each side, high roll selects.

Page 92, Sensor Operation Tasks (correction): The word *Difficult* is incorrectly used in the sensor task for locating a target (on the bottom of the left column). The word should be *[Difficulty]*, meaning a variable difficulty is used on this task. The referee notes for this task explain how to arrive at the proper difficulty level by using the starship’s UCP.

Page 92, right column, Sensor Lock (clarification): Each new combat round, as long as the target unit does not move out of its square, the sensor lock stays in effect.

If the sensing unit uses active sensors for the scan and the enemy has any functioning sensors, the sensing unit must reveal itself to the enemy (just as if the enemy had performed an exceptional success sensor scan on the sensing unit).

Page 92, right column, Defensive Weapons (correction): Remove the phrase “or proton beams against antimatter missiles”. There is no such weapon in the game, and proton screens do not work this way.

Page 93, left column, Range Modifiers (clarification): Change all references from “beyond planetary range” to “at far range”.

Page 93, right column, Spinal Mounts (omission and addition): Disintegrators are reduced by armor, but the armor is reduced by three levels for every extra roll blocked.

Page 93, right column, Critical Hits (omission and addition): Disintegrators are reduced by armor, but the armor is reduced by three levels for every extra roll blocked.

Page 94, left column, DMs for Ship Damage Tables, second entry (correction): Replace “If the weapon inflicting the hit has a UCP factor of 9 or less...” with “If the weapon inflicting the hit has a UCP factor of A or more, apply a DM of +6.”

Page 94, left column, DMs for Ship Damage Tables (omission): Add the following entry to the list: “If the weapon inflicting the hit was an antimatter missile or disintegrator, apply a DM of +9.”

Page 94, Power Plant-n (clarification): Reduce the UCP power plant factor of the target vessel by 10% (minimum of 1) for each -n level hit. For example, the Mercenary Cruiser in the *Imperial Encyclopedia* (800-ton displacement) has a power plant UCP factor of 20/40. A power plant-1 hit reduces this by 2 (10% of 20), to 18/40. Once the UCP factor is reduced to one-half (10/40), spinal mount weapons (if any) no longer work and the maneuver drive rating drops by one-half. An additional 5 hits on the Mercenary Cruiser would render the ship’s power plant inoperative.

Any additional hits once the inoperative level is reached are applied at 10% damage against the right-hand value (for the Mercenary Cruiser, this reduces the 40 on the right by 4 for each level of power plant hit). If the right-hand number reaches zero, the power plant is destroyed beyond repair.

Page 94, right column, Special Rules, Emergency Agility (addition): A space vessel with an antigrav-based maneuver drive has its maneuver drive number halved when 10 or more squares away from a massive astronomical body. A thruster-based maneuver drive does not suffer these effects.

Page 95, left column, Tractors (clarification): Tractor Pull/Target Weight = Agility and Speed Loss (round fractions up).

Page 95, left column, The Black Globe (correction): Because of the changes to the damage tables from *High Guard*, the DMs for flickering should be DM of –8, both for damage rolls against the ship, and on damage rolls it inflicts on enemy ships.

Page 96, Black/White Globes (clarification): Treat white globes just like black globes, except a ship mounting a white globe can see out or use any sensors, maneuver and fire. All other effects are the same. A black globe that is totally on shows up on enemy sensors as a “hole” in space. The prudent commander will flicker his black globe to allow enough emissions from his ship to escape so as to blend in with background levels and effectively be invisible to enemy sensors (roll 1Dx10% to determine the flicker rate needed to currently match local background levels). A shrewd commander will flicker a white globe for exactly the same effect.

Page 96, Damage Control and Repair, third sentence (correction): The third sentence should read, “In addition, its crew must be intact (currently has a number of crew segments available equal to half its original complement).”

Page 96, Damage Control and Repair, Field Repairs (addition): Add these paragraphs to the end of the Damage Control and Repair section.

Field Repairs: Any ship system not the victim of a critical hit may be repaired after battle at no cost and in no time, provided the ship’s crew is intact (currently has a number of crew segments available equal to half its original complement). All systems which suffered a partial loss (loss of factors) have half their lost factors restored, rounding fractions up. Fuel tanks are restored to full capacity (although lost fuel is not replaced). Half of all batteries which were knocked out are restored to full factor, and half are restored to half factor, rounding fractions up. Crew losses may not be repaired, although many of those lost will be only wounded and will be frozen pending delivery to naval base hospitals. The effects of critical hits (including lost armor) may not be repaired in this fashion.

Breakdown: Field repairs tend to break down. To keep a field-repaired system running is a Difficult task. Roll once a week per field-repaired system for breakdown: once for each drive, screen, battery, or other system. The roll is made the first time the system is used; if it is not used roll at the end of the week. Consequences of breakdown (aside from the system not working) are up to the referee. This task becomes Routine if the system did not break down the previous week, or if the entire week is spent doing nothing but repair (no jumps, battles, refueling, etc.); if both apply, the task becomes Simple. The referee may impose additional penalties on the task for heavy (or careful) use of a system. If a system breaks down it must be repaired again, but there are no further penalties.

Starport Repairs: Full repairs may be done at any class A or B starport, but jump drive repairs require double cost and time at class B starports. In any case, repairs must be conducted at shipyards of the required tech level (although the referee may make exceptions). The time required for repairs is one to four weeks for non-critical damage and four to eight weeks for critical hits. Repairs at starports require shipyard capacity equal to the ship's tonnage.

Field repairs are ignored: all original combat damage must be repaired. The cost is full cost of the system for critical hit repairs and one-fourth the cost of the system for other damage. Systems which were reduced to partial factor cost one-fourth the full cost times the percentage lost; for instance, if a level 8 meson screen were damaged to level 7, the cost of repair would be $(\frac{1}{4} \times \frac{1}{8})$ or $\frac{1}{32}$ the cost of a new meson screen.

Repair of a destroyed fire control system (a critical hit) costs one-tenth the cost of all ship batteries except the spinal mount.

For military ships, crew or frozen watch casualties are replaced free at any naval base. For merchant or PC owned ships, replacing crew members means hiring new crew members.

Jump Failure: Ships unable to jump because of critical hits on their power plant, jump drive, computer, or bridge present a special problem. If the bridge or computer is out, another ship may be linked to it for jump; the linking ship must have a computer and bridge as least as large as that of the damaged ship, and linking takes one week. Both move at the jump rate of the slowest ship and maneuver is impossible while linked. Roll for breakdown of the link after every jump; repair takes another week. Ships whose power plants or jump drives have been destroyed must either be transported to a starport inside a tender or be repaired in place. To repair a ship in place, first a message must be sent to a starport capable of repair; a new drive must be transported to the damaged ship; and it must be inserted, taking double the normal repair time (although not double cost).

Page 97, Starship Combat Tasks (clarification): Change all references from "beyond planetary range" to "at far range."

Page 97, Starship Combat Penetration Task (clarification): The task for penetrating a defense in starship combat is confusing. A clearer way to express the task is:

To penetrate a defense in starship combat:

Difficult, Off=computer size, penetration table DM; Def= computer size (confrontation).

Referee: Notice the penetration table DM belongs under the offensive DMs and is added, rather than a defensive DM that is subtracted.

Page 98, Table 1, Disintegrators (revision): The current Disintegrator Table makes this a weapon that is not really lethal, and since they are outrageously expensive, not really cost-effective. This was not the intent for these extremely high tech weapons. The following table properly upgrades disintegrators to a much more lethal and cost-effective weapon, as was originally intended:

		Attacking Disintegrator Factor															
		1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
To Hit:		5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	
To Pen:	Nuclear Damper																
1		2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	
2		2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	
3		1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
4		1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	
5		0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	
6		0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	
7		-1	0	0	1	1	2	2	3	3	4	4	5	5	6	6	
8		-1	-1	0	0	1	1	2	2	3	3	4	4	5	5	6	
9		-2	-1	-1	0	0	1	1	2	2	3	3	4	4	5	5	
A		-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	4	5	
B		-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	4	
C		-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	
D		-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	
E		-4	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	
F		-5	-4	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	

Page 98, Table 3, Tractors (correction): The Tractor Table is upside down and backwards, and because of this it is easier to penetrate better defenses, which is wrong. The correct table is given below:

		Attacking Tractor Factors								
		1	2	3	4	5	6	7	8	9
To Hit:		5	5	6	6	7	7	8	8	9
To Pen:	Repulsor									
1		9	10	11	11	11	11	11	11	11
2		8	9	10	11	11	11	11	11	11
3		7	8	9	10	11	11	11	11	11
4		6	7	8	9	10	11	11	11	11
5		5	6	7	8	9	10	11	11	11
6		4	5	6	7	8	9	10	11	11
7		3	4	5	6	7	8	9	10	11
8		2	3	4	5	6	7	8	9	10
9		1	2	3	4	5	6	7	8	9
A		0	1	2	3	4	5	6	7	8
B		-1	0	1	2	3	4	5	6	7
C		-2	-1	0	1	2	3	4	5	6
D		-3	-2	-1	0	1	2	3	4	5
E		-4	-3	-2	-1	0	1	2	3	4
F		-5	-4	-3	-2	-1	0	1	2	3

Page 99, Attacking Beam Factor table (correction): The "To Hit" values are incorrect. The correct values are:

		Attacking Beam Factor											
		1	2	3	4	5	6	7	8	9	A	B	C
To Hit:		3	4	4	5	5	6	6	7	7	8	8	9

Page 100, Table 6, Missile Table (correction and addition): The “To Hit” values are incorrect; also, since the 100-ton missile bay has been extended, a “D” factor column needs to be added to the Missile Tables. Also, move disintegrators from the Sand and Beam table to the Repulsor table. The second table should now read “Repulsor or Disintegrator”. The correct table is:

		Attacking Missile Factor												
		1	2	3	4	5	6	7	8	9	A	B	C	D
To Hit:		4	4	5	5	6	6	7	7	8	8	9	9	10
To Pen:	Sand or Beam													
1		6	7	8	9	10	11	11	11	11	11	11	11	11
2		5	6	7	8	9	10	11	11	11	11	11	11	11
3		4	5	6	7	8	9	10	11	11	11	11	11	11
4		3	4	5	6	7	8	9	10	11	11	11	11	11
5		2	3	4	5	6	7	8	9	10	11	11	11	11
6		1	2	3	4	5	6	7	8	9	10	11	11	11
7		0	1	2	3	4	5	6	7	8	9	10	11	11
8		-1	0	1	2	3	4	5	6	7	8	9	10	11
9		-2	-1	0	1	2	3	4	5	6	7	8	9	10
A		-3	-2	-1	0	1	2	3	4	5	6	7	8	9
To Pen:	Repulsor or Disintegrator													
1		-4	-3	-2	-1	0	1	2	3	4	5	6	7	8
2		-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7
3		-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6
4		-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5
5		-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4
6		-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3
7		-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2
8		-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1
9		-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0
A		-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1
B		-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2
C		-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3
D		-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4
E		-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5
F		-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6
To Pen:	Nuclear Damper or Proton Screen													
1		1	2	3	4	5	6	7	8	9	10	11	11	11
2		0	1	2	3	4	5	6	7	8	9	10	11	11
3		-1	0	1	2	3	4	5	6	7	8	9	10	11
4		-2	-1	0	1	2	3	4	5	6	7	8	9	10
5		-3	-2	-1	0	1	2	3	4	5	6	7	8	9
6		-4	-3	-2	-1	0	1	2	3	4	5	6	7	8
7		-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7
8		-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6
9		-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5
A		-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4
B		-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3
C		-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2
D		-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1
E		-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0
F		-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1

Page 100, Table 7, Particle Accelerator table (omission): The particle accelerator table was inadvertently omitted. Here it is:

Attacking Particle Accelerator Factor																			
	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G	H	J	K
To Hit:	2	3	4	4	5	5	6	6	7	8	8	8	8	8	9	9	9	9	9

(cont'd)														
	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z
To Hit:	10	10	10	10	10	11	11	11	11	11	12	12	12	12

Page 101, Starship Damage Tables (correction): The Die column is incorrect. The corrected table is given below.

STARSHIP DAMAGE TABLES			
<i>Die (2D)</i>	<i>Surface Explosion Damage Table</i>	<i>Radiation Damage Table</i>	<i>Interior Explosion Damage Table</i>
-2	No Effect	No Effect	No Effect
-1	Weapon-1	Weapon-1	Power Plant-1
0	Weapon-1	Weapon-1	Jump-1
1	Fuel-1	Weapon-1	Screens-1
2	Weapon-1	Weapon-1	Sensor-1
3	Weapon-1	Weapon-2	Power Plant-1
4	Fuel-1	Sensor-1	Jump-1
5	Weapon-1	Computer-1	Screens-1
6	Weapon-1	Weapon-2	Computer-1
7	Fuel-1	Sensor-2	Power Plant-1
8	Maneuver-1	Computer-2	Sensor-2
9	Weapon-2	Weapon-4	Computer-1
10	Fuel-2	Sensor-2	Crew-1
11	Maneuver-1	Computer-2	Power Plant-2
12	Weapon-3	Computer-2	Jump-2
13	Fuel-3	Crew-1	Screens-3
14	Maneuver-2	Computer-3	Sensor-3
15	Interior Explosion	Crew-1	Fuel Tanks Shattered
16	Interior Explosion	Computer-4	Critical
17	Interior Explosion	Crew-2	Critical
18+	Critical	Critical	Critical

<i>Use this column for:</i>	<i>Use this column for:</i>	<i>Use this column for:</i>
Fusion, Plasma, Laser, Missiles, Particle Accelerator, and Disintegrators.	Particle Accelerator, Nuclear and Antimatter Missiles and Meson Guns.	Meson Guns and Disintegrators.

IMPERIAL ENCYCLOPEDIA (0213, 1987)

The following corrections apply to the **Imperial Encyclopedia**.

Page 10, left column, Empress Marava (correction): Change Araloine to Arakoine.

Page 10, right column, Emperor Styryx (correction): Emperor Styryx died in 994.

Page 11, left column, Emperor Strephon (correction): This section is incorrect about Strephon delegating war powers to Norris for the Fourth Frontier War. Not only did Norris not become Duke of Regina until 1098, but the Fourth Frontier War was over before instructions had arrived from Capital regarding its conduct.

Page 20, Bilstein Yards (clarification): The library data printed in this section is circa late 1120. Most of the Glisten subsector (and thus the Bilstein Yards) was taken by the Aslan in late 1121.

Page 21, left column, fifth paragraph (correction): The last sentence should read “while a search went on for a member of Jaqueline’s family to take the throne”.

Page 29, left column, Iolanthe (correction): While the entry notes that Iolanthe died in 1116, the entry reads “Iolanthe (1052 to 1079)”. This should be corrected to read “Iolanthe (1052 to 1116).”

Page 37, left column, Second Frontier War (correction): Pronoun in last sentence should be “she”.

Page 42: right column, Thoengling Empire (correction): Capitalize “Thoengling” in the second sentence.

Page 41, Terran Confederation (correction): Some dates were left as Terran AD dates, rather than Imperial dates. The year UNSCA researchers discovered jump drive should be -2431 (2087 AD), the year the first interstellar jump expedition went to Barnard's Star was -2422 (2096 AD), and the year the expedition members were hurried into a hushed meeting with UNSCA was -2421 (2097 AD).

Page 44, left column, Vargr Campaigns (correction): Dates should be 210 to 348.

Page 60, left column, Inertial Locator (correction): As the Inertial Locator is a heavier, more expensive, TL-9 version of the cheap lightweight, TL-8 Inertial Navigator, remove the entry for "Locator, Inertial" on page 60.

Page 67, Drugs (clarification): Here, in tabular form, are all the drug prices:

<i>Drug</i>	<i>TL</i>	<i>Per Dose (Cr)</i>
Single Disease Vaccine	5	15
Multiple Disease Vaccine	10	20
Antitoxin	6	20
Antibiotics	6	50
Metabolics	8	1,000
Slow Drug	8	500
Medical Slow	7	100
Fast Drug	9	200
Combat Drug	9	750
Anagathics	15	20,000
Truth Drug	8	5,000
Slow Drug Antidote	10	600
Fast Drug Antidote	12	900

Page 67, Combat Drug (omission): The effect of combat drug was dropped. It should read "this drug increases personal strength and endurance each by two."

Page 68, Vacc Suits (addition): There is a TL 7 vacc suit available that acts as mesh armor, has a volume of 3.6 kiloliters, weighs 12 kg, and costs Cr 10,000. The Dexterity encumbrance is also -3.

A series of hostile environment "hard" vacc suits are also available. Their values are given in the table below:

<i>TL</i>	<i>Armor Value</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>	<i>Dex Encumbrance</i>
8	Cloth-2	3.8 kliters	35 kg	12,000	-3
9	Cloth-1	3.8 kliters	40 kg	16,000	-3
10	Cbt Armor-2	3.0 kliters	40 kg	18,000	-3
11	Cbt Armor-1	2.0 kliters	10 kg	20,000	-3
12	Cbt Armor	2.6 kliters	25 kg	150,000	-2

Page 74, Armor and Protection (addition): Clamshell armor is a jacket of combat armor which only protects the torso and groin areas.

Page 74, Mines (addition): Add the following section on Mines:

All mines have low signature until detonated.

APERS Mines: An APERS mine explodes if contacted, usually only wounding the person who activated it. A bounding APERS mine has a booster charge which propels it into the air about one meter before detonation.

Antitank Mines: Antitank mines require a ground pressure of at least 150 kilograms to detonate, so you don't waste 10 kilograms of explosives on one soldier. At TL9, bounding antitank mines with magnetic sensors are introduced. These are designed to leap into the air several meters and detonate to catch low-flying grav vehicles. Others are designed with short-range, armor-piercing rockets which fire up into the vehicle's grav plates.

Chemical Mines: Chemical mine effects depend on the filler—lethal, nonlethal, persistent or nonpersistent agents. One special type of chemical mine is the fou gas mine. When detonated, it spreads flaming petroleum products across the danger space. Another is the paint mine, a Vargr invention, which spreads phosphorescent neon paint across the danger space, ruining the chameleon effect of any battle dress or combat armor unfortunate enough to be on or cross the area.

Directional Mines: Directional mines are not buried. They are concealed at ground level and detonated by trip-wire or command. The first danger space is a circular area around the mine itself due to the blast. The second is the range of the primary effect. Everyone within a 30-degree-wide cone out to 50 meters is hit by flechettes.

Trip-Wire Mines: Trip-wire mines have three-meter trip-wires attached and are activated if the trip-wire is touched or cut. The signal mine is mainly used as a warning device at night or in poor visibility. The flare acts as a small illuminated round with only a few seconds' duration.

Chemical, directional and antitank mines can be command detonated.

Page 75, Weapons Prices (clarification): The values in the table are as follows. Length is in meters, Volume in liters, Weight in kilograms, and price in Credits.

Page 75, Snub Pistol 10mm Auto (correction): The Snub Pistol 10mm Auto volume and weight should be 0.4, not 4.0.

Page 75, Bolt Action Rifle 7mm (addition): The Bolt Action Rifle listed in the **Players' Manual** errata is available at TL 4 and costs Cr 100. In all other respects, it is identical to the standard Rifle 7mm listed on page 75 of the **Imperial Encyclopedia**.

Page 75, PGMP-13 (correction): The PGMP-13 volume and weight should be 0.9, not 9.0.

Page 75, PGMP-14 (correction): The PGMP-14 volume and weight should be 9.0, not 1.0.

Page 75, Weapons Prices (addition): Add the following values to the Weapons Prices table:

<i>Weapon</i>	TL	Weight	<i>Price (Cr)</i>	Ammo Weight	Ammo Price
Hand grenade HE	4	0.5	4	—	—
Hand grenade HE AP	5	1.0	10	—	—
Smoke grenade	5	0.5	3	—	—
Incendiary grenade	5	1.0	20	—	—
Chemical grenade	6	0.5	6	—	—
4cm Rifle grenade	5	0.4	8	—	—
6cm Rifle grenade	6	0.5	9	—	—
4cm RAM rifle grenade	8	0.6	10	—	—
APERS mine	5	1.0	20	—	—
Bounding APERS mine	5	3.0	75	—	—
Directional mine	6	2.0	250	—	—
Antitank mine	5	14.0	1,000	—	—
Chemical mine	5	15.0	1,400	—	—
Trip-wire mine	5	1.0	100	—	—
7cm AT GL-6	6	6.0	1,500	2.0	45
8cm AT GL-6	6	7.0	3,000	2.5	75
9cm AT GL-6	6	8.0	4,500	3.0	175
Disposable GL-6	6	2.0	200	—	—
4cm GL-7	7	2.0	500	0.3	5
4cm Auto GL-7	7	40.0	5,000	0.4	6
4cm RAM GL	8	2.0	1000	0.4	6
4cm RAM Auto GL	8	40.0	10,000	0.5	7
6cm Recoilless Rifle	6	21.0	7,500	1.3	75
8cm Recoilless Rifle	6	67.0	15,000	10.0	300
10cm Recoilless Rifle	6	152.0	18,000	16.0	450
Flamethrower	5	23.0	11,000	20.0	300

Page 75, Armor Table (addition and correction): Add the following values to the Armor table:

<i>Armor</i>	<i>TL</i>	<i>Vol</i>	<i>Weight</i>	<i>Price (Cr)</i>
Leather	1	3.0	5.0	75
Chainmail	1	4.5	25.0	150
Plate	2	6.0	35.0	250
Mesh	7	3.0	2.0	150
Clamshell	11	1.8	10.0	10,000

Page 76, Vehicles (correction): As there are numerous errors in the UCPs for the various vehicles presented, here are the revised UCPs for the ground vehicles:

GROUND CAR

CraftID: Ground Car, TL 5, Cr 3,100
Hull: 2/5, Disp=2, Config=4USL, Armor=4B, Unloaded=4 tons, Loaded=5 tons
Power: 1/2, Int Comb=0.1Mw, Duration=6 hours
Loco: 1/2, Wheels, Road=80 kph, Off-road=25 kph
Commo: None (some have a radio receiver)
Sensors: None
Off/Def: HardPoints=1
Control: Panel=Mech, Env=Basic env
Accomm: Crew=1 (Operator=1), Seats=Crampedx6
Other: Cargo=1kl, Fuel=0.072kl; ObjSize=Small, EmLevel=Faint

The ground car is an ordinary self-powered vehicle suitable for use in civilized areas on low-tech worlds.

WHEELED ATV

CraftID: Wheeled ATV, TL 6, Cr 46,400
Hull: 9/23, Disp=10, Config=4USL, Armor=6B, Unloaded=28 tons, Loaded=55 tons
Power: 1/2, IntComb=2Mw, Duration=4/12
Loco: 1/2, Wheels, Road=100kph, Off-road=35kph
Commo: None (some have a radio receiver)
Sensors: None
Off/Def: HardPoints=1
Control: Panel=Mech, Env=Basic env, basic Is
Accomm: Crew=1 (Operator=1), Seats=Roomyx17
Other: Cargo=25kl, Fuel=18kl; ObjSize=Small, EmLevel=Faint

The wheeled all-terrain vehicle is a wheeled vehicle used on low-tech worlds for exploration.

TRACKED ATV

CraftID: Tracked ATV, TL 6, Cr 49,600
Hull: 9/23, Disp=10, Config=4USL, Armor=6B, Unloaded=47 tons, Loaded=74 tons
Power: 1/2, IntComb=2Mw, Duration=4/12
Loco: 1/2, Tracks, Road=80kph, Off-road=50kph
Commo: Radio=Rgnl (500km)
Sensors: None
Off/Def: HardPoints=1
Control: Panel=Mech, Env=basic env, basic Is
Accomm: Crew=1 (Operator=1), Seats=Roomyx17
Other: Cargo=25kl, Fuel=18kl; ObjSize=Small, EmLevel=Faint

The tracked all-terrain vehicle is a tracked vehicle used on low-tech worlds for exploration.

OPEN-TOP AIR/RAFT

CraftID: Open-Top Air/Raft, TL 15, Cr275,000
Hull: 2/5, Disp=2, Config=4USL, Armor=4G, Unloaded=1.6 tons, Loaded=7.2 tons
Power: 1/2, Fusion=1.5Mw, Duration=60/180
Loco: 1/2, Std Grav, Thrust=8.0 tons, NOE=120kph, Cruise=90kph, Top=120kph
Commo: Radio=Planetary (50,000km)
Sensors: PassEMS=VDist (50km), ActEMS=VDist (50km), ActObjScan=Diff, ActObjPin=Diff, PasEngScan=Form
Off/Def: HardPoints=1
Control: Computer=0x2, Panel=HoloDynLinkx5, Env=Basic env
Accomm: Crew=1 (Operator=1), Seats=Roomyx4
Other: Cargo=5.4kl, Fuel=3.3kl; ObjSize=Small, EmLevel=Faint

The open-top air/raft is common on high-tech worlds, being efficient and inexpensive.

ENCLOSED AIR/RAFT

CraftID: Enclosed Air/Raft, TL 15, Cr389,000
Hull: 3.6/9, Disp=4, Config=1USL, Armor=4G, Unloaded=5 tons, Loaded=19 tons
Power: 1/2, Fusion=0.25Mw, Duration=60/180
Loco: 1/2, Std Grav, Thrust=20.6 tons, NOE=120kph, Cruise=90kph, Top=120kph
Commo: Radio=Planetary (50,000km)
Sensors: PassEMS=VDist (50km), ActEMS=VDist (50km), ActObjScan=Diff, ActObjPin=Diff, PasEngScan=Form
Off/Def: HardPoints=1
Control: Computer=0x2, Panel=HoloDynLink, Special=HUD, Env=Basic env, basic Is, inertial comp
Accomm: Crew=1 (Operator=1), Seats=Roomyx4
Other: Cargo=8kl, Fuel=13.5kl; ObjSize=Small, EmLevel=Faint

The enclosed air/raft is another of the most common vehicles on high-tech worlds; it has a slightly higher cost but correspondingly more comfort than the open version.

GCARRIER

CraftID: GCarrier, TL 15, MCr14.44
Hull: 7/18, Disp=8, Config=4SL, Armor=10G, Unloaded=20 tons, Loaded=48 tons
Power: 1/2, Fusion=54Mw, Duration=10/30
Loco: 1/2, Std Grav, Thrust=53 tons, NOE=120kph, Cruise=90kph, Top=120kph
Commo: Radio=Sys (1,000AU)
Sensors: PassEMS=VDist (50km), ActEMS=VDist (50km), ActObjScan=Diff, ActObjPin=Diff, PasEngScan=Rout
Off/Def: Hardpoints=1

	<i>Ammo</i>	<i>Pen/ Attn</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Drng Spc</i>	<i>Sig</i>	<i>ROF</i>
Fusion RFX-15	—	67/5	30	VDist(18)	4	45	H	160

Control: Computer=0x2, Panel=HoloDynLink, Special=HUD, Env=Basic env, basic Is, inertial comp
Accomm: Crew=1 (Operator=1), Seats=Roomyx4
Other: Cargo=27kl, Fuel=13kl; ObjSize=Small, EmLevel=Faint

The Gcarrier is an enclosed military or quasi-military grav vehicle. Similar in concept to an armored air/raft, the Gcarrier has a gun mount and an armored rear hatch door.

SPEEDER

CraftID: Speeder, TL 15, MCr1.36
Hull: 5/14, Disp=6, Config=1AF, Armor=4G, Unloaded=19 tons, Loaded=25 tons
Power: 1/2, Fusion=54Mw, Duration=45/135
Loco: 1/2, Std Grav, Thrust=52 tons, NOE=190kph, Cruise=810kph, Top=1,080kph
Commo: Radio=Sys (1,000AU)
Sensors: PassEMS=VDist (50km), ActEMS=VDist (50km), ActObjScan=Diff, ActObjPin=Diff, PasEngScan=Rout
Off/Def: HardPoints=1
Control: Computer=0x2, Panel=HoloDynLink, Special=HUD, Env=Basic env, basic Is, inertial comp
Accomm: Crew=1 (Operator=1), Seats=Roomyx2
Other: Cargo=2kl, Fuel=58kl; ObjSize=Small, EmLevel=Faint

The speeder is a streamlined grav-powered craft intended for high-speed transport between points on a world surface.

Pages 78 through 85, Starships, Spacecraft and Vehicles (clarification): The starship examples all include the 20% discount.

Page 78, Ship's Boat (correction): Top Speed (vacuum) = 4200kph.

Page 78, Slow Boat (correction): Top Speed (vacuum) = 2850kph.

Page 79, Pinnacle (correction): Top Speed (vacuum) = 3840kph.

Page 79, Slow Pinnacle (correction): Top Speed (vacuum) = 2120kph.

Page 80, Fighter (correction): The following design by Scott Kellogg (corrected for *Rebellion Sourcebook* and *Arrival Vengeance*) contains many corrections:

CraftID: Fighter, TL15, MCr19.63088

Hull: 9/23, Disp=10, Config=3AF, Armor=40G, Unloaded=179.7tons, Loaded=189.1tons

Power: 3/5, Fusion=627.5Mw, Duration=5/15

Loco: 3/5, StdGrav, Thrust=1773 tons, MaxAccel=9.4G (DeepSpace=4.7G), NOE=190kph, Cruise=3150kph, Top=200kph, Agility=6

Commo: Radio=System

Sensors: PassiveEMS=Interplanetary, ActiveEMS=Planetary, ActObjScan=Diff, ActObjPin=Diff, PasEngScan=Rout

Off: BeamLaser = xx2

Batt xx1

Bear xx1

Def: DefDM=+10

Control: Computer=2x3, Panel=HoloLink, Special=HoloHUDx1/2/2, Env=basic env, basic Is, ext Is, grav plts, inertial comp.

Accomm: Crew=1 (Operator =1), Seats=Roomyx1

Other: Cargo=6.75kl, Fuel=37.65kl; ObjSize=Avg, EmLevel=Mod

Page 80, Scout/Courier (correction): Fuel=515 kliters.

Page 81, Seeker (correction): Fuel=504 kliters.

Page 81, Far Trader (correction): Replace "basic basic Is " with "basic env, basic Is".

Page 82, Yacht (correction): Maneuver=1, Jump=1.

Page 83, Mercenary Cruiser (correction): Maneuver=3, Jump=3. The pinnaces should be modular cutters.

Page 86, Reference to Interplanetary Travel Diagram and Formula (correction): The travel diagram and formula are in the *Referee's Companion*.

Page 87, Low Passage (omission): Refunds or civil liability if a low passenger fails to survive the trip are not allowed. A player character who travels low passage and survives should keep records on the discrepancy between his chronological age and physical age; a character does not age physically while in low passage. Low passage costs Cr1,000 and includes a baggage allowance of 10 kilograms.

Page 92, Step 6, Travel to 100 diameters (addition): Double the travel time if the vessel has an antigrav-based maneuver drive.

Page 92, Step 9, Jumpspace (correction): Replace "2 to 5=days" with "2 to 5 = 7 days".

Page 93, Step 10, Emerge from Jumpspace (addition): Double the travel time if the vessel has an antigrav-based maneuver drive.

Page 94, Spinward Marches Data (corrections): Note that on all pages, UPP should be replaced with UWP.

The following changes should be made to the data presented.

Placement: There should be no world listed for hex 2632.

TL and Data Changes: 886-945 (0230), 494-908 (0625), 567-908 (1031), 728-907 (1214), Judice (1337), 871-438 (1510), Tavonni (1520), Steel (1529), Iron (1626), Bronze (1627), Mithril (1628), Djinni (2111), Gerome (2818), and Huderu (3114) should all have a TL of 0 and Population Multiple of 0. Pavanne (2905) has the wrong UPP listed; it should be E210000-0.

Base Codes: Zeycude (0101) should have no base code.

Zone Codes: Hefry (1909) should not have an amber zone.

Trade Codes: Ninjar (0608) should have "Ic", Enope (2205) should have "Ic", Jesedipere (3001) should have "Lo", and Aramis (3110) should have "Cp".

Recording Devices (omission): Recording devices were accidentally omitted from the **Imperial Encyclopedia**. They are listed here for your convenience.

TEXT RECORDERS

At TL 10, text recorders can transcribe: that is, they can produce written text directly from spoken words. Information is recorded on small tape cassettes costing Cr 3. At TL 13, data is recorded on holographic crystals instead. Tapes can hold approximately 20 million words; crystals can hold ten times that. At TL 10, text recorders can transcribe spoken voice to written text automatically. Memclips for specific languages are also available—each allows transcribing from a specific spoken language.

<i>Description</i>	<i>TL</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
Text Recorder	10	2 liters	1 kg	1,200
Linguistics Memclip	10	—	—	150
Recording Tape (20 million words)	10	—	—	3
Recording Crystal (200 million words)	13	—	—	3

SOUND RECORDERS

Extremely small, pencil-sized recorders appear at TL 10, and can easily record anything detectable by the human ear. Dedicated computer software within the recorder allows the user to instantly playback any part of a recording. By TL 13, sound recorders use holographic crystals as the recording media. Cartridges can hold approximately 10 hours of recordings; crystals can hold ten times that.

<i>Description</i>	<i>TL</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
Sound Recorder	10	—	—	300
Recording Cartridge (10 hours)	10	—	—	5
Recording Crystal (100 hours)	13	—	—	5

IMAGE RECORDERS

Two-dimensional images remain the most common method of image recording, with the speed and ease of use improving drastically at higher tech levels. Although holography is generally invented around TL 7, inexpensive and practical methods to produce and view still holographic images are not perfected until TL 11. Inexpensive two-dimensional image recordings (snapshots) are still a popular alternative to three-dimensional images beyond TL 11.

Two-Dimensional Still Camera: The TL 10 still camera is inexpensive, easy to use and produces detailed images that can be viewed instantly. The “recording card” used to record images is re-usable (200 images). The recording crystal can hold ten times more than the card.

<i>Description</i>	<i>TL</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
2D Still Camera	10	0.1 liter	0.1 kg	150
Recording Card (200 images)	10	—	—	3
Recording Crystal (2000 images)	13	—	—	3

Three-Dimensional Still Camera: In spite of the awkwardness of using the first marginally portable three-dimensional still cameras (which require a separate power pack) at TL 11, 3-D image recorders are in public demand, because of their great advantages over the two-dimensional machines. At TL 13, with the advent of compact batteries providing the necessary sustaining power level, three-dimensional still cameras reach handheld size. The recording card can hold 40 images, the crystal 400.

<i>Description</i>	<i>TL</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
3D Still Camera	11	14 liters	8 kg	1,500
Power Pack (TL 11, 12 camera)	11	2 liters	2 kg	600
Recording Card (40 images)	11	—	—	10
3D Still Camera	13	1 liter	0.5 kg	5,000
Recording Crystal (400 images)	13	—	—	10

VIDEO RECORDERS

Even though holovision typically becomes available at TL 10, producing holovideos still requires expensive, bulky equipment and high power at that tech level. Often, not until TL 13 are effective techniques devised for producing inexpensive holovideos with simple, lightweight equipment.

Two-Dimensional Video Recorder: Electronic recorder of visual images, either as single frames or sequential motion pictures using integral camera and lens system. Information is recorded on small visual tape cassettes for later viewing. At TL 13, recording is on holographic crystals. Each tape can hold 60,000 distinct images or one hour of motion pictures; crystals can hold 10 times that amount.

<i>Description</i>	<i>TL</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
2D Video Recorder	8	3 liters	1.2 kg	900
Recording Tape (1-hour capacity)	8	—	—	2
Recording Crystal (10-hour capacity)	13	—	—	2

Three-Dimensional Video Recorder: The three-dimensional video recorder is barely portable at TL 13. More portable units are commonly available by TL 14, with TL 15 bringing forth the handheld 3-D recorder. All of these recorders use holocrystals for image storage. Separate power packs are not needed. Normal crystals hold 1 hour of information, high capacity crystals (TL 15 only) hold five.

<i>Description</i>	<i>TL</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
3D Video Recorder	13	20 liters	15 kg	15,000
	14	8 liters	6 kg	20,000
	15	2 liters	2 kg	30,000
Recording Crystal (1 hour)	13	—	—	15
Hi-Capo Crystal (5 hour)*	15	—	—	50

*works only with TL15 recorder

Drop Capsules (omission): Drop Capsules were accidentally omitted from the **Imperial Encyclopedia**. They are listed here for your convenience.

DROP CAPSULES: AVAILABILITY

The following types of capsules can be carried to transport troopers from orbit to a planet surface or to evacuate crew and passengers from a vessel in distress. Note that sale of drop capsules is restricted by Imperial authorities, so only military vessels and licensed mercenary organizations can legally obtain them. Escape capsules are unrestricted and sometimes find use with unlicensed mercenaries. Three types of drop capsules and one type of standard escape capsule are widely available:

Atmospheric Reentry Capsule (ARC): Constructed at TL13 and used by military and mercenary organizations. The ARC is lightly armored (8F) and can accommodate one Battle Dress-equipped trooper with some supplies (4.0 kl of space for the trooper with 2.5 kl of additional storage volume and 430.3 kg maximum allowable weight). Battery power lasts one hour, allowing the capsule to deliver the trooper to the surface and return to the pre-designated recovery point. Guidance is by on-board inertial navigation with a hand computer providing guidance and control. A 50km-range radio is installed to transmit and receive voice communication and guidance data during recovery.

Assault Atmospheric Reentry Capsule (AARC): The AARC is an improved version of the ARC constructed at TL14 used by the military and a few well-equipped mercenary units. It is more heavily armored than the ARC (20G) and can also carry more weight (683.0 kg). It is identical in performance and interior space to the ARC but weighs more and is much more expensive. For this reason, the ARC is still widely used for training drops and insertions on worlds that do not pose a significant threat to the assaulting force.

Assault Atmospheric Reentry Capsule – High Survivability (AARC-HS): The AARC-HS is a TL15 design intended for use in very high-threat insertions and is only used by the military. Armor is increased (28G) and a set of ten decoy launchers is installed. During re-entry, these launchers deploy decoys that mimic the signature of a drop capsule, providing multiple false targets to draw surface defensive fire away from the capsules carrying troopers. Additional storage space is reduced to 1.42 kl and is reduced to 476.5 kg, but performance remains identical to the other drop capsules.

Emergency Atmospheric Reentry Capsule (EARC): The EARC is similar to the ARC with identical performance characteristics and armor (8F). However, the single roomy passenger position in the ARC is replaced by three cramped positions in the EARC. Cargo space is reduced to 0.5 kl and this is used to store an emergency supply kit. Maximum allowable weight for the EARC is 354.6 kg. If launched while a ship is in or close to orbit, battery life of one hour will allow for atmospheric re-entry and safe landing. Otherwise, the batteries will sustain life support systems for 22 hours. The on-board radio system broadcasts a distress signal over all emergency bands and can be used by rescue vessels as a homing point.

<i>Description</i>	<i>TL</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
Atmospheric Reentry Capsule (ARC)	13	6.75	0.570	16,000
Assault ARC (AARC)	14	6.75	0.820	33,000
AARC – High Survivability (AARC-HS)	15	6.75	1.520	67,000
Emergency ARC (EARC)	13	6.75	0.650	22,000

DROP CAPSULES: LAUNCH AND RECOVERY

The following devices can be installed to allow military vessels or craft to launch drop capsules from orbit and recover them after return to orbit. Note that the sale of military launchers and ancillary equipment are restricted by Imperial authorities, so only military vessels and licensed mercenary organizations can legally obtain them.

Military Drop Capsule Launch System: This system includes a launch tube, exterior blast doors, environment control seals, operator's controls, and associated operating and feed machinery. The 2 displacement tons of volume also includes space to hold one capsule that is ready for launch, and space for the equipment and supplies used for refurbishing returned capsules for future missions. The system holds one capsule that is ready for launch, but the system weight does not include the weight of the capsule as the capsule weight will vary by type. The system only draws the stated power during launch operations, so it does not need to be powered during normal day-to-day shipboard operations. Loading an additional capsule into the launcher takes ten minutes, using the hoist included with the launch system.

Drop Capsule Ready Racks: Installation of such a system allows drop capsules to be launched at a faster rate using a single Launch System. A military launch system is capable of launching a drop capsule every 30 seconds when the drop capsules are connected to the launcher by a Ready Rack. Loading additional drop capsules into the launcher or on to the ready rack takes ten minutes per capsule (necessary lift assisting mechanisms are considered part of the launcher or ready rack volume). The listed volume, weight, and cost are for one capsule. Multiply these figures by the number of capsules needed in the Ready Rack.

Drop Capsule Recovery Bay: Recovery of returned drop capsules cannot be accomplished through the launch tubes or through standard airlocks. Vehicle or craft bays can be used for this purpose, but this interferes with other vessel operations so normally a recovery bay (essentially an over-sized air lock) will be installed in a location adjacent to the launchers. The automated navigation system on the drop capsule is designed to return the capsule to its point of launch or a pre-determined recovery point. Returning capsules will remain stationary in that location, awaiting recovery instructions. A recovery bay includes a regional-range (500 km) radio transmitter to transmit information used to remotely maneuver capsules into the recovery bay. Capsules used to evacuate casualties will have a transponder activated, allowing them to receive priority for recovery. Also, returned capsules are routinely subjected to a densitometer scan to ensure that they do not contain any unwanted passengers or other surprises. The listed power, weight, and cost are constant for all sizes of recovery bay. For volume, allow 6.75 kl for the bay and door operating machinery and equipment, and add 6.75 kl of volume for each capsule required.

Emergency Capsule Launch Systems: The EARC launch system consists of a single capsule with a launch mechanism to be used only in an emergency that requires evacuation of a ship. Rather than use vessel power (since a ship in distress may not have a functioning power plant), the EARC launcher relies on the propulsion system of the capsule for launch. Required volume is one displacement ton, half of which is the volume of the carried EARC. The EARC launch system does not include the hoist used to reload capsules or the refurbishment equipment found on military launch systems. Reloading capsules therefore must be accomplished at a starport rated at Class C or above. The ready racks available for military launchers are not available for EARC launchers – each EARC launcher is a stand-alone unit.

The EARC launcher can be installed for military or civilian vessels; unlike the military drop capsule launchers, these civilian components can be obtained through normal channels without restriction.

<i>Description</i>	<i>TL</i>	<i>Power</i>	<i>Volume</i>	<i>Weight</i>	<i>Price (Cr)</i>
Military Drop Capsule Launch System	13	33.75	27.00	13.50	100,000
Military Drop Capsule Launch System	15	24.00	27.00	13.50	85,000
Drop Capsule Ready Rack	13	—	13.50	6.75	10,000
Drop Capsule Recovery Bay	13	00.01	6.75	1.00	25,000
Emergency Capsule Launch System	13	—	13.50	7.50	80,000

Weight and Price do not include individual drop capsules, except for the ECLS, which includes the weight and cost of one Emergency ARC.

REBELLION SOURCEBOOK (0214, 1988)

The following errors have been identified for the **Rebellion Sourcebook**:

Page 6, Introduction, second paragraph (correction): The date for Dulinor's elevation to Archduke of Ilelish is 1104.

Page 10, Introduction, second paragraph (correction): The correct order of death should be Emperor Strephon, Empress Iolanthe, the Aslan Yerlyaruwo ambassador, and then Grand Princess Ciencia Iphegenia.

Page 19, left column, third paragraph (clarification): Based on TNS items published in Challenge, xboats brought news of the assassination to Terra on 036-1117.

Page 19, right column, second paragraph (correction): The Corridor and Old Expanses Fleets were ordered to Zarushagar, not Core.

Page 26, Fleets of the Imperium (clarification): There are several duplications of fleet numbers:

<i>Fleet Number</i>	<i>Location</i>	<i>Recommendations</i>
108	Old Expanses M and N	<i>[could be same fleet]</i>
128	Reft E and Delphi M	Delphi M = 118
179	Ilelish F and L	Ilelish L = 189
193	Spinward Marches F and Deneb M	
212	Spinward Marches B and Vland O	
213	Spinward Marches C, Deneb B, and Corridor I	
214	Deneb A and Corridor H	
255	Corridor G and Lishun N	Lishun N = 256
260	Deneb N and Antares A	

Fleet numbers remaining unused are: 131, 303, 309, 310, 312, 315.

Page 27, Fleets, second paragraph (clarification): The breakdown of the Corridor Fleet given here does not match the map on the previous page; the 16th, 27th, and 70th Fleets are in Fornast sector, while the 41st Fleet is in Zarushagar sector.

Page 28, Imperial Navy Command Channels (clarification): The legend has been reversed; the dotted line indicates noble supervision, while the undotted line indicates naval orders.

Page 32, Depots of the Imperium (correction and clarification): The depot in Antares has been left off the map, and the word Depot in Corridor sector covers up Kaasu, the sector capital. The location of Usdiki in Gushemege has inexplicably moved.

Page 37, Expected Troop Strengths on a Specific World (omission): The higher tech levels were not kept when the table was reprinted from JTAS #10.

	<i>Population</i>										
<i>TL</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>A</i>
17	—	—	—	—	—	—	—	5	50	5C	5K
18	—	—	—	—	—	—	—	5	50	5C	5K
19	—	—	—	—	—	—	—	1	10	1C	1K
20	—	—	—	—	—	—	—	1	10	1C	1K

Page 42, Factions of the Rebellion, right column (correction): The senior Duke of Daibei sector is Craig, not Horvath. The recently named Archduke of Deneb is Norris, not Morris.

Page 43, Friends and Enemies (omission): The Friends and Enemies table referred to, and the explanatory text, is missing. It was printed in the HIWG fanzine *TIFFANY STAR #6*, and created by Marc Miller and Mike Mikesh.

Lucan: Anyone that has not declared himself for Lucan is an enemy. Norris is an exception because he is too far and cut off from involvement.

Margaret: She vocally opposes both Lucan and Dulinor for their villainous acts that put them in power. Her sympathies are with the Brothers of Varian, although no formal alliances are established. Brzk similarly opposes Lucan and Dulinor, which is cause for some goodwill from Margaret. But since both are contenders for the Throne, no friendship exists.

Dulinor: He will oppose anyone competing directly against him for the Iridium Throne. Dulinor and Daibei are friends. The remark on the 1120 map, "Clashes Between Dulinor and Daibei," is really an interesting one time event.

Antares: As a candidate for the Throne, Brzk has declared himself against both Lucan and Dulinor. In his own sector, his fleets actively resist the Vargr raiders, but he has hopes of winning their cooperation through diplomacy.

Daibei: This federation has two established enemies, Lucan and the Solomani. Because Brzk is in active combat with Lucan, and Margaret is similarly defending against the Solomani, these are considered friends where the Ilelish faction is not involved.

Vland: This faction has committed itself to a separate direction, effectively turning its back on the Third Imperium. Its competing with neighboring factions for territory, while ignoring other factions too remote for concern.

Strephon: He has no friends among other factions because of doubt regarding his validity. However, Strephon frequently finds favor among the Imperial worlds outside the spheres of control of the other factions.

Brothers of Varian: Margaret sympathizes with this faction and often lends it support. However, they do not necessarily extend friendship to Margaret in turn. Elements within this group may support different factions.

Norris: He will stay as uninvolved with the Rebellion as he can for as long as he can.

Aslan: The clans are generally uninvolved in the Rebellion except with the invasion of Deneb. However, the drama that resulted in the death of the Aslan ambassador on Capital has moved Hierate feelings decidedly against Dulinor.

Vargr: The aggressions of the Vargr are being directed against the Third Imperium, which is now represented by Lucan. They have no particular antipathy against individual factions.

Zhodani: All Imperial factions and the Solomani will continue to mistrust the Zhodani because of psionic prejudice. The same attitude is not returned although the Zhodani do see a unified Imperium and Deneb as a threat.

Solomani: All Imperial factions are technically at war with the Solomani, although only a few are involved at the front. The Aslan are regarded as enemies because of the disagreement about the overlap of the Solomani Sphere into the Hierate.

FRIENDS & ENEMIES (1117-1120)

	Luc	Mar	Dul	Ant	Dab	Vln	Str	Van	Nor	Asl	Vrg	Zho	Sol
Lucan	—	e	e	e	e	e	e	e	.	.	e	e	e
Margaret	e	—	e	.	f	.	.	f	.	.	e	e	e
Dulinor	e	e	—	e	f	e	e	.	.	.	e	e	e
Antares	e	.	e	—	f	.	.	.	.	.	.	e	e
Daibei	e	f	f	f	—	.	.	.	.	.	.	e	e
Vland	e	.	e	.	.	—	e	.	.	.	.	e	e
Strephon	e	.	e	.	.	e	—	.	.	.	e	e	e
Varian	e	.	.	.	.	.	.	—	.	.	.	e	e
Norris	.	.	.	.	.	.	.	.	—	e	e	e	e
Aslan	.	.	e	.	.	.	.	.	e	—	.	.	e
Vargr	e	.	.	.	.	.	.	.	.	.	—	.	.
Zhodani	e	.	.	.	.	.	.	.	e	.	.	—	.
Solomani	e	e	e	e	e	e	e	e	e	e	.	e	—

Legend: e = enemy, f = friend, . = neutral.

Page 43, right column, Devastated Worlds (correction): The sentence with “bludgeons were used as small asteroids” should read “small asteroids were used as bludgeons”.

Page 44, fourth paragraph, last sentence (correction): “Dulinor sacked the man” should be “Lucan sacked the man”.

Page 49, left column, third line (correction): In the phrase “When Prince Asan almost married Marian”, the word “almost” should be deleted.

Page 54, Julian War, second paragraph (correction): The two references to Sharurshid should refer to Makhidkarun.

Page 56, Introduction, second paragraph (correction): “was wreaked with “ should be “wracked with”.

Page 65, right column, artwork (clarification): The artwork is for Antares, not Daibei.

Page 66, Introduction, second paragraph (correction): The “fire” started in 589.

Page 71, On the Eve of the Rebellion (correction): In the map legend, the capital of Corridor is Kaasu, and Dlan and Ilelish are reversed, and Cyril is not the sector capital of Reft sector (the portions of Reft sector are administered from Deneb and Verge). On the map, Usdiki has been moved from its location in *Atlas of the Imperium*.

Page 73, 1119, subheading (clarification): Borders and boundaries shown are as of 365-1119.

Page 74, 1120, subheading (clarification): Borders and boundaries shown are as of 365-1120.

Page 77, Imperial Rampart-Class Fighter (correction): See the errata for the fighter from *Imperial Encyclopedia* page 80, above.

Page 78, Vargr -class Battle Cruiser (correction): The following design by Clay Bush contains many corrections:

CraftID: *Aek Naz* Battle Cruiser, Type BC, TL11, MCr14,277(d)
Hull: 27,000/67,500, Disp=30,000, Config=1SL, Armor=50E, Unloaded=504,208tons, Loaded=543,955tons
Power: 2,883/5,767, Fusion=259,500MW, Duration=28/84
Loco: 540/1,080, Maneuver=1; 1,350/2,700, Jump=2; NOE=150kph, Cruise=750kph, Top=1,000kph, Vacuum=1,200kph; Agility=0
Commo: Radio=System, LaserCom=System, MaserCom=System
Sensors: PassEMS=Interstellarx2, ActEMS=FarOrbitx2, Densitometer=High, NeutrinoDect=1Gw; ActObjScan=Rout, ActObjPin=Rout, PasObjScan=Form, PasObjPin=Form, PasEngScan=Rout, PasEngPin=Form
Off: PartAcc= xDx, Missile= x83, BLaser= xx4, Plasma= x5x
Batt xS0, 1 20, x20, x2x
Bear xS0, 1 18, X18, x2x
Def: DefDM= +4, ArmorDM = -3
Repulsor= x4x, Sandcaster= xx7
Batt x4x, x20
Bear x4x, X18
Control: Computer=5fibx3, Panel=Dynamicx40,550, Special=HUDx300, Env=basic env, basic ls, ext ls, grav plts.
Accomm: Crew=304(30x10; bridge=18, engrng=107, maint=9, gunnery=62, flight=25, troops=30, command=41, steward=10, medical=2), staterooms=152; Subcraft=shuttlex3, cutterx4, enclosed air/raftx2
Other: Cargo=26,556kl, Fuel=188,442kl, Magazine=10,000 missiles. PurificationPlant(24hrs), Scoops; ObjSize=Large, EmLevel=Strong

This Tech level 11 battlecruiser shows the problems inherent in creating a heavy-firepower starship at the lower levels of technology. The result is a series of tradeoffs. To fit the required equipment into a 30,000-ton hull, power plant fuel capacity was cut.

No inertial compensators. Battery-round is 250 missiles; magazine can carry 40 battery-rounds.

Page 79, Vargr *Foghoks*-class Heavy Cruiser (correction): The following design by Clay Bush contains many corrections:

CraftID: *Foghoks* Heavy Cruiser, Type CA, TL11, MCr4,734(d)
Hull: 9,000/22,500, Disp=10,000, Config=4SL, Armor=45E, Unloaded=175,809 tons, Loaded=198,695 tons
Power: 1,050/2,100, Fusion=94,500MW, Duration=28/84
Loco: 990/1,980, Maneuver=4; 270/540, Jump=2; NOE=150kph, Cruise=750kph, Top=1,000kph, Vacuum=3,400kph; Agility=0
Commo: Radio=System, LaserCom=System, MaserCom=System
Sensors: PassEMS=Interstellar, ActEMS=FarOrbit, Densitometer=High, NeutrinoDect=1Gw; ActObjScan=Rout, ActObjPin=Rout, PasObjScan=Form, PasObjPin=Form, PasEngScan=Rout, PasEngPin=Form
Off: Missile= x7x, BLaser= xx3
Batt x8x, x10
Bear x8x, x10
Def: DefDM= +4, ArmorDM= -1
Sandcaster= xx4
Batt X10
Bear X10
Control: Computer=5fibx3, Panel=Dynamicx10,703, Special=HUDx150, Env=basic env, basic ls, ext ls, grav plts.
Accomm: Crew=151(15x10; bridge=13, engrng=38, maint=3, gunnery=41, flight=20, troops=10, command=20, steward=5, medical=1), staterooms=151; Subcraft=shuttlex2, air/raftx4
Other: Cargo=19,246kl, Fuel=52,002kl, Magazine=20,000 missiles. PurificationPlant(28hrs), Scoops; ObjSize=Avg, EmLevel=Mod

This Vargr cruiser demonstrates the even greater problems (when compared to the larger *Aek Naz* class) of lower tech levels when using smaller hulls. This ship sacrifices endurance and armor to achieve the jump levels and weaponry it needs.

No inertial compensators. Battery-round is 400 missiles; magazine can carry 50 battery-rounds.

Page 80, Common Imperial Transport (correction): The following design by Clay Bush contains many corrections:

CraftID: Common Imperial Transport, Type MP, TL15, MCr4,089(d)
Hull: 18,000/45,000, Disp=20,000, Config=3USL, Armor=40G, Unloaded=93,537 tons, Loaded=243,387 tons
Power: 347/695, Fusion=93,780MW, Duration=27/81
Loco: 360/720, Manuever=1; 720/1,440, Jump=3; NOE=75kph, Cruise=225kph, Top=300kph, Vacuum=1,200kph; Agility=0
Commo: Radio=Systemx2, LaserCom=Systemx2, MaserCom=Systemx3
Sensors: PassiveEMS=Interstellar, ActiveEMS=FarOrbitx2; ActObjScan=Rout, ActObjPin=Rout, PasObjScan=NA, PasObjPin=NA, PasEngScan=Rout, PasEngPin=NA
Off: Missile=x05, Blaser=xx7
 Batt 15 12
 Bear 15 12
Def: DefDM=+8, OptNucDamper=1
 Sandcaster=xx5
 Batt 30
 Bear 29
Control: Computer=9fibx3, Special=LgHoloDisplayx4, HeadsUpHolox20, Env=basic env, basic ls, ext ls, grav plts, inertial comp
Accomm: Crew=87 (20x5; bridge=8, engrng=12, maint=1, gunnery=45, flight=5, command=11, steward=5, medical=0), HighPass=20, staterooms= 107, emerlow=4; Subcraft=ship's boat, air/raft
Other: Cargo=143,943kl, Fuel=84,385kl, Magazine=9,000 missiles. PurificationPlant(48hrs), Scoops; ObjSize=Large, EmLevel=Mod
 Battery-round is 180 missiles; magazine can carry 50 battery-rounds.

Page 81, Imperial SEH-class Light Cruiser (correction): The following design by Clay Bush contains many corrections:

CraftID: SEH Light Cruiser, Type CL, TL15, MCr13,147(d)
Hull: 27,000/67,500, Disp=30,000, Config=1SL, Armor=50G, Unloaded=316,257 tons, Loaded=334,059 tons
Power: 2,900/5,800, Fusion=522,000MW, Duration=27/81
Loco: 3,240/6,480, Manuever=3; 1,620/3,240, Jump=3; NOE=190kph, Cruise=750kph, Top=1,000 kph; Agility=0
Commo: Radio=Systemx3, LaserCom=Systemx5, MaserCom=Systemx3
Sensors: PassiveEMS=Interstellarx2, ActiveEMS=FarOrbitx2, Densitometer=High, NeutrinoDect=10kw, EMM; ActObjScan=Rout, ActObjPin=Rout, PasObjScan=Rout, PasObjPin=Rout, PasEngScan=Simple, PasEngPin=Rout
Off: MesonGun=J0x, ParticleAcc=xx2, Missile=x90, Blaser=xx7, Plasma = xx3, Fusion=x04
 Batt S 1 15 10 5 4
 Bear S 1 14 9 5 4
Def: DefDM=+8, NucDamper=7, MesonScrn=6, ArmorDM=-3
 Repulsor=x90, Sandcaster=xx6
 Batt 1 12
 Bear 1 11
Control: Computer=9fibx3, Panels=HoloLinkx1,433, Special=LgHoloDisplayx12, Env=basic env, basic ls, ext ls, grav plts, inertial comp; Electronic Circuit Protection
Accomm: Crew=177 (30x6; bridge=13, engrng=35, gunnery=52, flight=17, troops=30, command=24, steward=5, medical=1), staterooms=177; Subcraft=cutterx5, air/raft
Other: Cargo=292kl, Fuel=250,128kl, Magazine=300,000 missiles; PurificationPlant(26 hrs), Scoops, ObjSize=Large, EmLevel=Mod

The SHE-class light cruisers are named for recipients of the Imperial Starburst for Extreme Heroism. Battery-round is 750 missiles. Magazine can carry 40 battery-rounds.

Page 82, Imperial Voroshilef-class Battleship (correction): The following design by Clay Bush contains many corrections:

CraftID: Modified Voroshilef Battleship, Type BB, TL13, MCr87,749(d)
Hull: 180,000/450,000, Disp=200,000, Config=4SL, Armor=50F, Unloaded=2,281,332 tons, Loaded=2,416,693 tons
Power: 28,500/57,000, Fusion=5,130,000MW, Duration=17/52
Loco: 21,600/43,200, Manuever=3; 10,800/21,600, Jump=3; NOE=170kph, Cruise=750kph, Top=1,000kph, Vacuum=2,860kph, Agility=6
Commo: Radio=Systemx2, LaserCom=Systemx3, MaserCom=Systemx3
Sensors: PassiveEMS=Interstellar, ActiveEMS=FarOrbitx2, Densitometer=HighPen/100m, NeutrinoDect=100kwx2; ActObjScan=Rout, ActObjPin=Rout, PasObjScan=Diff, PasObjPin=Diff, PasEngScan=Rout, PasEngPin=Diff
Off: Disint=Axx, MesonGun=03x, Missile=x80, Blaser=xx7, Fusion=x60

Batt S	8	146	A	30
Bear S	5	95	7	20

Def: DefDM=+13, NucDamper=3, MesonScrn=3, ArmorDM=-3
Sandcaster=xx5

Batt	20
Bear	13

Control: Computer=9x3, Special=LgHoloDisplayx100, HeadsUpHolox40, Env=basic env, basic ls, ext ls, grav plts. No inertial comp. Electronic circuit protection.
Accomm: Crew=1,030 (200x5; bridge=40, engrng=462, maint=0, gunnery= 82, flight=63, troops=200, command=141, steward=34, medical= 8), staterooms=536, FrozenWatch=0, LowPass=0, LowBerths=410.
Subcraft=40-ton fighterx20, shuttlex5, air/raftx4; one 40-ton launch tube.
Other: Cargo=22,045kl, Fuel=1,618,800kl, Magazine=182,500 missiles.
PurificationPlant(38hrs), Scoops; ObjSize=Large, EMLevel=Strong.

This version includes replacement of the particle accelerator spinal mount by a Disintegrator-A, replacement of a TL 13 fusion power plant by a TL 15 version, and replacement of Model/7fib computers by Model/9fib computers. Battery-round is 7,300 missiles. Magazine carries 25 battery-rounds.

Page 83, artwork (clarification): The artwork shown is a 50,000-ton Ghalalk-class heavy cruiser from Supplement 6, Fighting Ships; the larger Planet-class heavy cruiser is similar.

Page 83, Imperial Planet-class Heavy Cruiser (correction): The following design by Clay Bush contains many corrections:

CraftID: Planet Heavy Cruiser, Type CA, TL15, MCr31,239(d)
Hull: 67,500/168,750, Disp=75,000, Config=2SL, Armor=50G; Unloaded=721,210tons, Loaded=770,099tons.
Power: 5,240/10,480, Fusion=943,200MW, Duration=29/87.
Loco: 5,063/10.125, Manuever=2, 6,075/12,150, Jump=5; NOE=190kph, Cruise=750kph, Top=1,000kph, Vacuum=2,120kph, Agility = 0.
Commo: Radio=Systemx3, LaserCom=Systemx10, MaserCom=Systemx3
Sensors: PassiveEMS=Interstellarx3, ActiveEMS=FarOrbitx3, Densitometer=LowPen/250m, HighPen/1kmx2, NeutrinoDect=10kwx3, EMSjammer=FarOrbitx3, EMM; ActObjScan=Rout, ActObjPin=Rout, PasObjScan=Rout, PasObjPin=Rout, PasEngScan=Simp, PasEngPin=Rout
Off: MesonGun=J0x, PartAcc=x90, Missile=x93, Blaser=xx7, Fusion=x04

Batt S	3	25	A	25	A
Bear S	3	19	8	19	8

Def: DefDM= +8, NucDamper=9, MesonScrn=9, ArmorDM=-3
Repulsor=x90, Sandcaster=xx7

Batt C	30
Bear 9	21

Control: Computer=9fibx6, Panels=HoloLinkx6,623, Special=LgHoloDisplayx20, HeadsUpHolox40; Env=basic env, basic ls, ext ls, grav plts, inertial comp; Electronic circuit protection.
Accomm: Crew=323 (75x4; bridge=17, engrng=84, gunnery=55, flight=29, troops=75, command=43, steward=10, medical=10), FrozenWatch=164, staterooms=323, lowberths=164, emerlow=233; Subcraft=shuttlex3, cutterx4, air/raftx4, 50-ton fighterx50, one 50-ton launch tube.
Other: Cargo=4,650kl, Fuel=631,984kl, Magazine=64,000 missiles; PurificationPlant(12hrs), Scoops; ObjSize=Large, EMLevel=Mod.

Battery-round is 1280 missiles. Magazine can carry 50 battery-rounds.

Page 84, Imperiallines Frontier Transport Type TI (correction): The following design by Clay Bush contains many corrections:

CraftID: Frontier Transport, Type TI, TL15, MCr607(d)
Hull: 1,800/4,500, Disp=2,000, Config=4SL, Armor=40G, Unloaded=11,680 tons, Loaded=23,645 tons.
Power: 69/137, Fusion=12,330MW, Duration=30/90.
Loco: 135/270, Manuever=2, 81/162, Jump=2; NOE=190kph, Cruise=750kph, Top=1,000kph, Vacuum=2,120kph; Agility=0.
Commo: Radio=Systemx3, LaserCom=Systemx3, MaserCom=Systemx3
Sensors: PassiveEMS=Interstellarx3, Densitometer=HighPen/1km, NeutrinoDet=10kwx2; ActObjScan=NA, ActObjPin=NA, PasObjScan=Rout, PasObjPin=Rout, PasEngScan=Simp, PasEngPin=Rout
Off: Missile=x03, Blaser=xx4, FusionGun=x03
 Batt 3 3 1
 Bear 3 3 1
Def: DefDM=+9, OptNucDamper=1
 Sandcaster=xx4
 Batt 2
 Bear 2
Control: Computer=9fibx3, Special=LgHoloDisplay; Env=basic env, basic ls, ext ls, grav plts; No inertial comp, Electronic Circuit Protection.
Accomm: Crew=16 (2x8; bridge=2, engrng=2, gunnery=2, flight=5, troops=2, command=1, medical=1), Staterooms=16, EmerLow=5; Subcraft=shuttle, air/raft.
Other: Cargo=11,371kl, Fuel=8,489kl, Magazine=225 missiles; PurificationPlant(24hrs), Scoops; ObjSize=Avg, EMLevel=Mod.

The Imperiallines TI Frontier Transport is a common sight throughout the Imperium, operating on trade and commerce missions to worlds off the main trade routes.

No active sensors, no inertial compensators, only 9 hardpoints. Battery-round is 9 missiles. Magazine can hold 25 battery-rounds.

Page 85, Imperiallines Frontier Transport Type TJ (correction): The following design by Clay Bush contains many corrections:

CraftID: Frontier Transport, Type TJ, TL15, MCr797(d)
Hull: 1,800/4,500, Disp=2,000, Config=4SL, Armor=40G, Unloaded=14,337 tons, Loaded=19,973 tons.
Power: 69/137, Fusion=12,330MW, Duration=30/90.
Loco: 135/270, Manuever=2, 189/378, Jump=6; NOE=190kph, Cruise=750kph, Top=1,000kph, Vacuum=2,120kph; Agility=0.
Commo: Radio=Systemx3, LaserCom=Systemx3, MaserCom=Systemx3
Sensors: PassiveEMS=Interstellarx3, Densitometer=HighPen/1km, NeutrinoDet=10kwx2; ActObjScan=NA, ActObjPin=NA, PasObjScan=Rout, PasObjPin=Rout, PasEngScan=Simp, PasEngPin=Rout
Off: Missile=x03, Blaser=xx4, FusionGun=x03
 Batt 3 3 1
 Bear 3 3 1
Def: DefDM=+9, OptNucDamper=1
 Sandcaster=xx4
 Batt 2
 Bear 2
Control: Computer=9fibx3, Special=LgHoloDisplay; Env=basic env, basic ls, ext ls, grav plts; No inertial comp, Electronic Circuit Protection.
Accomm: Crew=16 (2x8; bridge=2, engrng=2, gunnery=2, flight=5, troops=2, command=1, medical=1), Staterooms=16, EmerLow=5; Subcraft=shuttle, air/raft.
Other: Cargo=4,664kl, Fuel=13,889kl; Magazine=225 missiles; PurificationPlant(24hrs), Scoops; ObjSize=Avg, EMLevel=Mod.

The Imperiallines TJ Frontier Transport is externally identical to the Imperiallines TI Frontier Transport. Internally, the only difference is the installation of jump-6 drives and a reduced cargo capacity. While TI ships routinely cover Imperial-lines territory conducting trade and commerce, the Type TJ ships use their immense jump capacity to serve as clandestine Imperial couriers.

No active sensors, no inertial compensators, only 9 hardpoints. Battery-round is 9 missiles. Magazine can hold 25 battery-rounds.

Page 86, Imperial *Trepida* Grav Tank (correction): The following corrections are from Jake Collins:

CraftID: Trepida Grav Tank, TL 14, *MCr14.803*
Hull: 12/29, Disp=10, Config=4SL, Armor=40G, *Unloaded=163 tons, Loaded=179 tons*
Power: 1/2, Fusion=126Mw, Duration=43/130
Loco: 1/2, Std Grav, Thrust=400 tons, NOE=180kph, *MaxAccel=1.2G*, Cruise=750kph, Top=1,000kph
Commo: Radio=Cont(5,000km), Maser=Dist(5km)×2
Sensors: EMMask, ActEMS=Dist(5km)×2, PassEMS=Vdist(50km), ActObjScan=Form, ActObjPin=Form, PassObjScan=Form
Off: Hardpoints=1

	<i>Ammo</i>	<i>Pen/Attn</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Drng Spc</i>	<i>Sig</i>	<i>ROF</i>
Fusion RFX-14	—	67/5	30	VDist(18)	3	45	H	80

Def: Prismatic Aerosol×2, Sandcaster×2
Control: Computer=3×2, Dyn Link, HUD
Accomm: Crew=2 (operator/gunner, cmdr), Seats=Roomy×2, Bunks=2, Env=basic env, basic ls, ext ls, grav plates, inertial comp
Other: Fuel=73kl, Cargo=10kl, *ObjSize=Average*, EmLevel=Faint

The *Trepida* class became the standard issue Imperial grav tank (at least at the high end of the technology level scale) in 1109, and is widely distributed within the Imperium.

Page 87, *Astrin* Grav APC (correction): The following corrections are from Jake Collins:

CraftID: *Astrin* Grav APC, TL 14, *MCr12.956*
Hull: 12/29, Disp=10, Config=4SL, Armor=40G, *Unloaded=139 tons, Loaded=152.4 tons*
Power: 1/2, Fusion=120Mw, *Dur=29/86*
Loco: 1/2, Std Grav, Thrust=400 tons, NOE=180kph, *MaxAccel=1.6G*, Cruise=750kph, Top=1,000kph
Commo: Cont (5,000km), Maser=Dist (5km)×2
Sensors: EM Mask, Act EMS=Dist(50km)×2, Pass EMS=VDist (50km), ActObjScan=Form, ActObjPin=Form, PassEngScan=Form
Off: Hardpoints=1
Def: Prismatic Aerosol×2, Sandcaster×2
Control: Computer=3×2, DynLink, HUD
Accomm: Crew=2 (operator/gunner, cmdr), Seats=Roomy×2, Adequate×10, Env=basic env, basic ls, ext ls, grav plates, inertial comp
Other: *Fuel=48kl*, Cargo=10kl, *ObjSize=Average*, EmLevel=Faint

The *Astrin* class grav armored personnel carrier was developed as a companion to the *Trepida* grav tank to carry troops into battle. Its deployment has followed the *Trepida* by about three years. It carries up to 10 combat-equipped soldiers.

Page 88, Aslan *Ihatei*-class Transport Type NP (correction): The following design by Clay Bush contains many corrections:

CraftID: *Ihatei* Transport, Type NP, TL13, *MCr9,295(d)*
Hull: 45,000/112,500, Disp=50,000, Config=3SL, Armor=40F, Unloaded=303,543tons, Loaded=539,120tons.
Power: 1,245/2,490, Fusion=112,050MW, Duration=30/90.
Loco: 3,375/6,750, Manuever=1, 2,700/5,400, Jump=3; NOE=170kph, Cruise=750kph, Top=1,000kph; Agility=0.
Commo: Radio=System, LaserCom=System, MaserCom=System
Sensors: PassiveEMS=Interstellar, ActiveEMS=FarOrbit×2, NeutrinoDect=100 kw×2, Densitometer=HighPen/100m; ActObjScan=Rout, ActObjPin=Rout, PasObjScan=Diff, PasObjPin=Diff, PasEngScan=Rout, PasEngPin=Diff
Off: None. 50 empty turrets. Two 100-ton bays. Sufficient power for missile bays, missile turrets and sand turrets.
Def: DefDM=+6, NucDamper=2.
Control: Computer=7fib×3, Panels=HoloLink×2,605, Special=LgHoloDisplay×5, HeadsUpHolo×50; Env=basic env, basic ls, ext ls, grav plts. No inertial comp.
Accomm: Crew=705 (50×14; bridge=13, engrng=46, maint=0, gunnery=8, flight=53, troops=50, command=28, steward=6, medical=501); Staterooms=705, LowBerths=10,000; Subcraft=shuttlex5, cutter×8, air/raft×10 (2 of 6 cutters in empty 100-ton bays.)
Other: Cargo=222,610kl, Fuel=178,152kl; PurificationPlant(24hrs), Scoops; ObjSize=Large, EMLevel=Strong.

The *Ihatei*-class transport is one of several standard designs encountered in Aslan colonial fleets. Like all of them, it provides economical movement of colonists (in low berths) and their supporting heavy equipment and start-up supplies (about 1.5 tons per colonist).

No magazines specified in design: assume use of cargo space near bays and turrets. 441MW to power any weapons installed in bays and turrets.

Page 89, Aslan Weakhto-class Cruiser (correction): The following design by Clay Bush contains many corrections:

- CraftID:** Weakhto Light Cruiser, Type CL, TL13, MCr5,400(d)
- Hull:** 9,000/22,500, Disp=10,000, Config=2SL, Armor=50F, Unloaded=172,582tons, Loaded=178,687tons.
- Power:** 1,000/2,000, Fusion=135,000MW, Duration=28/84.
- Loco:** 990/1,980, Manuever=4; 360/720, Jump=3; NOE=170kph, Cruise=750kph, Top=1,000kph; Agility=0.
- Commo:** Radio=Systemx2, LaserCom=Systemx10, MaserCom=Systemx2
- Sensors:** PassiveEMS=Interstellar, ActiveEMS=FarOrbit, NeutrinoDect=100kw, Densitometer=HighPen/100m; ActObjScan=Rout, ActObjPin=Rout, PasObjScan=Diff, PasObjPin=Diff, PasEngScan=Rout, PasEngPin=Diff
- Off:** PartAcc=x40, Missile=x93, Blaser=xx5, PlasmaGun=x04, Fusion=x04

Batt	1	2 A	A	5	5
Bear	1	2 A	A	5	5
- Def:** DefDM=+6, NucDamper=3, MesonScreen=1, ArmorDM=-3.
Sandcaster=xx5

Batt	A
Bear	A

Control: Computer=7fibx3, Panels=HoloLinkx1,185, Special=LgHoloDisplayx5, HeadsUpHolox20; Env=basic env, basic ls, ext ls, grav plts, inertial comp.

Accomm: Crew=134 (10x14; bridge=12, engrng=25, maint=4, gunnery=52, flight=8, troops=10, command=18, steward=4, medical=1); staterooms=72; Subcraft=shuttlex2, air/raft.

Other: Cargo=687kl, Fuel=77,400kl, PurificationPlant(48hrs), Scoops; ObjSize=Avg, EMLevel=Strong.

The *Weakhto* class cruiser is typical of those deployed by the Aslan ihatei fleets on colonization missions. Considered obsolete by contemporary Aslan standards, the ship has enough life in it to provide effective protection for the colony ships it escorts, and to provide scout and recon services as the fleet seeks new colony worlds.

Weakhto class ships are named for famous clan battles; weakhto means battle.

Battery-round is 230 missiles. Magazine can carry 25 battery-rounds.

Page 91, Zhodani Z-80 Grav Tank (correction): The following corrections are from Jake Collins:

- CraftID:** *Qiknavra* Grav Tank, TL 14, MCr13.865
- Hull:** 12/30, Disp=10, Config=4SL, Armor=40G, Unloaded=118.7 tons, Loaded=129.8 tons
- Power:** 1/2, Fusion=126Mw, Duration=65/196
- Loco:** 1/2, Std Grav, Thrust=400 tons, NOE=180kph, MaxAccel=2G, Cruise=750kph, Top=1,000kph
- Commo:** Radio=Rgnl(500km)x2
- Sensors:** EMMask, ActEMS=Dist (50km), Neutrino=1Mw, PassEMS=VDist (50km), Headlightsx2, Densitometer=LowPen/50m, ActObjScan=Diff, ActObjPin=Diff, PassObjScan=Rout, PassObjPin=Diff, PassEngScan=Diff, PassEngPin=Form

Off: Hardpoints=1

	Ammo	Pen/ Attn	Dmg	Max Range	Auto Tgts	Drng Spc	Sig	ROF
Pulse Laser	0	51/4	60	Rgnl (250)	3	30	L	80
VRF Gaussx2	20000	21/4	10	VDist (4.5)	4	—	L	300

Def: Prismatic Aerosolx2

Control: Computer=2/bisx2, Dyn Link, HUD

Accomm: Crew=2 (operator/gunner, cmdr), Seats=Roomyx2, Env=basic env, basic ls, ext ls, grav plates, inertial comp

Other: Fuel=110kl, Cargo=3.4kl, ObjSize=Average, EmLevel=Faint

The *Qiknavra* (Imperial designation Z-80) class is one of the Zhodani's newest grav tank designs. The craft is intended to be an inexpensive, yet highly survivable vehicle on the battlefield. To date, the Zhodani have kept the complete vehicle details a secret from the Imperium. The statistics given are known only by the Zhodani.

Page 95, Final Climax, second paragraph (correction): Mora is misspelled Moran.

REFEREE'S COMPANION (0215, 1988)

The following errors have been identified for the **Referee's Companion**:

Page 11, left column, fourth and fifth paragraphs (correction): The morale formulas in this section are given incorrectly. They should be (in order): $(13+7)\div 2=10$; $(10+7)\div 2=9$; $(10+4)\div 2=7$.

Pages 16 and 17, Definitions (omission): The meaning of the term DP in the charts on pages 16 and 17 is not given; it should be "Damage Points".

Page 17, Final Conglomerate Unit (correction): The Final Conglomerate Unit should have a DP of 24, not 20, as 16×3 (players still conscious) divided by $2 = 48 \div 2 = 24$.

Page 23, In-System Operations, Travel Formula (correction): The Travel Formula is incorrect; it should be $T=\sqrt{D/A}/4.32$ or rather $T=(\sqrt{D/A})/4.32$.

Page 23, Computing Travel Times (correction): This paragraph should read as follows:

Computing Travel Times: The travel formula assumes constant acceleration to a midpoint, turnaround, and constant deceleration to arrive at the destination at rest, as shown in the diagram. There are three variables in the formula; if any two are known, the third can be determined by using the formula. For example, if acceleration in Gs and time in hours are known, distance travelled in kilometers can be found. If distance in kilometers and time in hours are known, acceleration in Gs can be found.

Page 28, Technology Chart 1, Computers/Robotics (omission): At TL 9, the Model/3 Computer is not listed.

Page 28, Technology Chart 2, Land/Water/Air Transportation (correction): Some items were accidentally moved around. The table lists "Ultra Heavy Grav Modules" at TL 10, and "Heavy Grav Modules" at TL 11. These should be switched. The TL 10 Air entry "Advanced Grav Modules" should be "Advanced Grav Vehicles". The "Fusion Output 7 kw per liter", "Primitive Antimatter Plants" and "Antimatter 1 Mw/liter" entries under Space Transportation should all be moved to the Energy column (leaving their TL as is). The TL 18 "Self-Aware Starships" entry under Air Transportation should be under Space Transportation.

COACC (0216, 1989)

A number of errors occurred in the writing and publication of Close Orbit and Airspace Control Command. In addition, the rules were less than complete in a few areas. The following attempts to correct these errors and address these omissions.

Page 9, artwork (clarification): The drawing shown is that of the Akron (TL-5) non-rigid airship described on page 87. The drawing on page 87 is that of the Rio de Janeiro class luxury passenger dirigible. This design was submitted for inclusion in **COACC** but not published.

Page 11, Ypres (TL5) Primitive Fighter (correction): The correct technology level is TL 5, not 4. The correct endurance is 3.3 hours, not 8 hours.

Page 17, Laramie (TL7) Jet Fighter (clarification and correction): Missile bays are 200 kg missile bays. Each may hold one Semi Active Radar Homing missile or Active Radar Homing missile. Note that the maximum external stores for this aircraft are 9.45 tons.

Page 19, Reno (TL9) Fighter/Interceptor (clarification): Missile bays are 200 kg missile bays. Each may hold one Semi Active Radar Homing missile or Active Radar Homing missile.

Page 21, Abilene (TL8) Jet Fighter (clarification): Missile bays are 200 kg missile bays. Each may hold one Semi Active Radar Homing missile or Active Radar Homing missile.

Page 23, Daytona class Orbital Fighter/Interceptor (correction): Correct TL is 10, not 9.

Page 25, Nuremburg class Attack Aircraft (clarification): Maximum external stores= 1500 kilograms (reduced from 2000 kgs).

Page 29, Weapons mounts (addition): Purpose-built attack aircraft with no sweep back in the wing design may have more than two outboard hardpoints on each wing. All hard points may carry weapons as long as the total external weapons load does not exceed the limits stated in the rules.

Page 29, Weapons mounts (clarification): Note that the rules state aircraft NORMALLY have no more than one fuselage hardpoint. This does not rule out additional fuselage hardpoints such as those found on the Mexico City bomber design.

Page 31, Weight (addition): A purpose-built attack aircraft may carry up to 40 percent of its clean weight as external stores and its gross takeoff weight may be 140 percent of its clean weight.

Page 32, Engines (correction and clarification): The fusion rocket details on this table are incorrect. More options are available in **Hard Times** "One Small Step" chapter, with errata in this document under **Hard Times**.

Page 33, Weapon Mounts Table (addition): Add the following line:

<i>Code</i>	<i>TL</i>	<i>Type</i>	<i>Drag</i>	<i>Weight</i>	<i>Capacity</i>	<i>Price (Cr)</i>
Pre-Stellar	7	Missile Bay	(1)	0.20	1 200 kg air-to-air missile	3500

Page 34, left column, Agility (correction): The formula for calculating agility should be:

$$(((MS / 1000) + G) \times (100 / (100 - ME))) + MP$$

Page 37, Port Stanley (TL8) VTOL Medium Attack Aircraft (clarification): This aircraft may carry either a 2000 liter drop tank beneath its fuselage or two 1500 liter drop tanks on its inboard underwing hardpoints, not both.

Page 42, Airship Design, Lift (correction): Replace the second and later paragraphs as follows:

In Atmosphere Type 6 or 7 (Standard Atmosphere), 1000 cubic meters of hydrogen in a lift envelope provides 1.14 tons of lift, 1000 cubic meters of helium in a lift envelope provides 1.06 tons of lift, 1000 cubic meters of air (heated to 100 degrees above ambient temperature) provides 0.32 tons of lift.

Lift is increased 27 percent (multiply by 1.27) in Atmosphere Type 8 or 9; lift is decreased by 17 percent (multiply by 0.83) in Atmosphere Type 4 or 5.

Costs: Cr 40 per 1000 cubic meters for hydrogen, Cr 120 per 1000 cubic meters for Helium (if available – roll 3+ on 1D for helium to be available on a given world).

Page 42, The Envelope, Envelope Characteristics (correction): Replace the paragraph with the following:

A rigid envelope is constructed of metal with a fabric covering; it costs Cr 50,000 per 1000 cubic meters of volume and weighs 0.4 metric tons per 1000 cubic meters of volume. A non-rigid envelope is constructed of coated fabric without the metal reinforcement; it costs Cr 10,000 per 1000 cubic meters of volume and weighs 0.4 metric tons per 1000 cubic meters of volume.

Useful lift is calculated by subtracting the weight of the envelope from the lift of the volume of the envelope. For example, 1000 cubic meters of non-rigid airship envelope using helium produces 1.06 tons of lift; the envelope itself weighs 0.4 tons. The 1000 cubic meter envelope produces 0.66 (1.06 - 0.4) tons of useful lift.

Page 42, Engines, second sentence (correction): They need at least 1 ton of thrust for each 85 tons of total lift, not for each 10,000 cubic meters of volume.

Page 42, Engines, fifth sentence (correction): Each engine car (if required) weighs 0.25 metric tons (empty), will hold up to 25 metric tons of engines and fuel, and costs Cr 25,000. The cost, weight and volume of the engine cars are included in the airship car calculation; the data is provided for deckplan and role-playing purposes only.

Page 42, Airframe, third and fourth sentence (correction): Airship cars require simple airframes sized to accommodate the useable lift of the airship. They weigh 0.01 metric tons per ton of useable lift, cost Cr 10,000 per ton of useable lift, and have a volume of 40 cubic meters per ton of useable lift.

Page 42, Controls, second and third sentence (correction): Allocate 0.02 metric tons of controls per ton of Total Lifting Capacity. Airship controls cost 20,000 credits per ton of controls.

Page 42-43, Crew and Passengers (correction): Replace the second and following paragraphs as follows:

Airships intended for up to 8 hours of operation require at least one Commander, one pilot, one gunner per weapon, and one steward per 8 passengers. Airships intended for over 12 hours of continuous operation require one commander, four pilots, two engineers, one maintenance man per 200,000 cubic meters, one gunner per weapon and one steward per 8 passengers. Airships intended for over 24 hours of continuous operation require three commanders, six pilots, three engineers, one maintenance man per 200,000 cubic meters, one gunner per weapon and one stewards per 8 passengers.

For trips of 8 hours or less, each crewman requires a crew station and each passenger requires a roomy seat and amenities equivalent to half of a small stateroom (0.001 EP; 13.5 cubic meters; 1 metric ton; Cr 20,000). For trips longer than 8 hours, each crewman requires half of a small stateroom (0.001 EP; 13.5 cubic meters; 1 metric ton; Cr 20,000) and each passenger requires a small stateroom (0.002 EP; 27 cubic meters; 2 metric ton; Cr 40,000).

For trips longer than 24 hours, each Officer in the crew requires a small stateroom (0.002 EP; 27 cubic meters; 2 metric ton; Cr 40,000), each crewman requires half of a small stateroom (0.001 EP; 13.5 cubic meters; 1 metric ton; Cr 20,000) and each passenger requires a stateroom (0.003 EP; 54 cubic meters; 4 metric ton; Cr 400,000).

Page 44, Weight and Lift Envelope, Lift (correction): Replace the second and later paragraphs as follows:

In Atmosphere Type 6 or 7 (Standard Atmosphere), 1000 cubic meters of hydrogen in a lift envelope provides 1.14 tons of lift, 1000 cubic meters of helium in a lift envelope provides 1.06 tons of lift, 1000 cubic meters of air (heated to 100 degrees above ambient temperature) provides 0.32 tons of lift.

Lift is increased 27 percent (multiply by 1.27) in Atmosphere Type 8 or 9; lift is decreased by 17 percent (multiply by 0.83) in Atmosphere Type 4 or 5.

Costs: Cr 40 per 1000 cubic meters for hydrogen, Cr 120 per 1000 cubic meters for Helium (if available – roll 3+ on 1D for helium to be available on a given world).

Page 44, Weight and Lift Envelope, Envelope Characteristics (correction): Replace with the following:

A rigid envelope is constructed of metal with a fabric covering; it costs Cr 50,000 per 1000 cubic meters of volume and weighs 0.4 metric tons per 1000 cubic meters of volume. A non-rigid envelope is constructed coated fabric without the metal reinforcement, it costs Cr 10,000 per 1000 cubic meters of volume and weighs 0.4 metric tons per 1000 cubic meters of volume.

Useful lift is calculated by subtracting the weight of the envelope from the lift of the volume of the envelope. For example, 1000 cubic meters of non-rigid airship envelope using helium produces 1.06 tons of lift; the envelope itself weighs 0.4 tons. The 1000 cubic meter envelope produces 0.66 (1.06 - 0.4) tons of useful lift.

Page 46, Airship Ratings, Lift (correction): Replace the paragraph on Lift as follows:

Lift: Calculate lift by multiplying your volume by 1.14 if you are using hydrogen as a lifting gas, by 1.06 if you are using helium as a lifting gas or by 0.32 if you are using heated air as a lifting gas. Multiply the calculated lift by 1.27 in Atmosphere Type 8 or 9, or by 0.83 in Atmosphere Type 4 or 5. This yields the total lift in kilograms. Divide this by 1000 to determine the total lift in metric tons.

Calculate the weight of the envelope and any gas cells in metric tons by dividing the volume in cubic meters by 2500. Subtract the weight of the envelope from the total lift to obtain usable lift remaining for gondolas, engines, passenger and crew accommodations, and weapons.

Page 46, Airship Design Checklist, various steps (correction): Replace the steps below with the appropriate entry:

2. Calculate the total lifting capacity of that volume of hydrogen, helium or hot air.
3. Multiply the volume of the envelope or gasbag in cubic meters by 25 credits for a non-rigid gasbag or 50 credits for a rigid envelope to determine the cost in credits.
4. Divide the volume of the envelope or gasbag in cubic meters by 2500 to determine the weight of the envelope or gasbag in metric tons.
7. Add airship cars as needed. Airship cars are designed as simple airframes sized to accommodate the useable lift of the airship. They weigh 0.01 metric tons per ton of useable lift, cost Cr 10,000 per ton of useable lift, and have a volume of 40 cubic meters per ton of useable lift.
8. Add engine cars as needed. Up to two engines may be attached to the main airship car. Each engine beyond the first two must be installed in a separate engine car. Each engine car (if required) weighs 0.25 metric tons (empty), will hold up to 25 metric tons of engines and fuel, and costs Cr 25,000. The cost, weight and volume of the engine cars were included in the airship car calculation; the data is provided for deckplans and role-playing purposes only.
9. Allocate tonnage for controls. The Simple Controls for an Airship weigh 0.02 metric tons per ton of Total Lifting Capacity [from step 2] and cost 20,000 credits per ton of controls.
10. Determine crew and passenger accommodations. The required crew for airships intended for up to 8 hours of operation is one Commander, one pilot, one gunner per weapon, and one steward per 8 passengers. The required crew for airships intended for over 12 hours of continuous operation is one commander, four pilots, two engineers, one maintenance man per 200,000 cubic meters, one gunner per weapon and one steward per 8 passengers. The required crew for airships intended for over 24 hours of continuous operation is three commanders, six pilots, three engineers, one maintenance man per 200,000 cubic meters, one gunner per weapon and one stewards per 8 passengers.

For trips of 8 hours or less, each crewman requires a crew station (see step 9) and each passenger requires a roomy seat and amenities equivalent to half of a small stateroom (0.001 EP; 13.5 cubic meters; 1 metric ton; Cr 20,000). For trips longer than 8 hours, each crewman requires half of a small stateroom (0.001 EP; 13.5 cubic meters; 1 metric ton; Cr 20,000) and each passenger requires a small stateroom (0.002 EP; 27 cubic meters; 2 metric ton; Cr 40,000). For trips longer than 24 hours, each Officer in the crew requires a small stateroom (0.002 EP; 27 cubic meters; 2 metric ton; Cr 40,000), each crewman requires half of a small stateroom (0.001 EP; 13.5 cubic meters; 1 metric ton; Cr 20,000) and each passenger requires a stateroom (0.003 EP; 54 cubic meters; 4 metric ton; Cr 400,000).

Page 49, Seattle (TL8) All-Weather Heavy Attack Aircraft (correction): Delete the fuselage hardpoint. This aircraft correctly has only the four inboard wing hardpoints and a maximum external load of 6 tons.

Page 50, Semiactive Radar Homing Missiles (clarification): The task "To radar illuminate target aircraft" becomes Formidable if the range is greater than 60 squares at launch. If lock is maintained and the range to target is reduced to below 60 squares in subsequent combat rounds, the task reverts to Difficult.

Page 53, Mexico City (TL9) Bomber (correction): The correct name for this class is New York City. The Mexico City designation belongs to a class of heavy freighter described later in this book.

Page 55, Semiactive Radar Homing Missiles (clarification): The task "To radar illuminate target aircraft" becomes Formidable if the range is greater than 60 squares at launch. If lock is maintained and the range to target is reduced to below 60 squares in subsequent combat rounds, the task reverts to Difficult.

Pages 59 and 64, Dive Bombing Release Points (correction): This table should read as follows:

<i>Range</i>	<i>Altitude (meters)</i>	<i>DM</i>
0	500 – 1500	+2
1	1500 – 3000	0
2	3000 – 4500	-1

Units: *Range:* Squares from target square

Page 59, “To hit designated target area with bombing attack” (correction):

Referee: DM -1 if bombing with high-drag bombs.

Page 67, Fuel Tanks (correction): “These 500-, 1500, and 2000-liter external tanks...”

Page 68, Air-to-Air Missiles (correction): The range figures for the SARH and ARHM should read 6/90 rather than 6/60.

Page 68, Air-to-Air Missiles (addition): Add this line to the Air-to-Air Missiles table:

<i>TL</i>	<i>Type</i>	<i>Weight</i>	<i>Range Min/Max</i>	<i>Speed</i>	<i>Dam.</i>	<i>Cost (Cr)</i>
8	Heavy ARHM	1000	10/300	15	44	10,000

Note: Aircraft intending to fire the Heavy ARHM must be equipped with Regional radar.

Page 69, Gun Weights Table (addition): Weights are in kilograms. Machinegun belts hold 100 rounds; autocannon belts hold 50 rounds. Multibarrel autocannon are fed from drumlike ammunition hoppers. These hoppers typically between 500 and 1500 rounds, depending on the available carrying capacity of the aircraft design.

GUN WEIGHTS

<i>Weapon</i>	<i>Weight per gun</i>	<i>Weight per belt</i>	<i>Weight per round</i>
Medium Machinegun	9.5	2.5	—
Light Machinegun	5.5	2.5	—
Heavy Machinegun	15	10	—
20mm autocannon	200	20	0.4
20mm 3-barreled autocannon	220	—	0.4
20mm 6-barreled autocannon	310	—	0.4
30mm autocannon	240	40	0.8
30mm 6-barreled autocannon	370	—	0.8

Page 87, Akron Airship (correction): The airship pictured in the illustration is the Rio de Janeiro rigid dirigible. The Akron is pictured on page 9. The Rio de Janeiro class specifications are:

CraftID: *Rio de Janeiro* Rigid Airship TL 5, MCr 16.15

Hull: 13,333/33,333, Disp=4000, Vol=200,000 cubic meters, EnvelopeWeight=176tons, UsableLift=66tons, Airframe=Simple.

Power: 10x 4/10 IntComb=0.25Mw, Duration=103 hours, 20 minutes

Loco: Basic Propeller (Diesel), Thrust=20 tons, Cruise=90kph, Top=120kph, Agility=0

Commo: Radio=Continental

Sensors: None

Off/Def: None

Control: Simple

Accomm: Crew=20 (3 Pilots, 3 Co-Pilots, 3 Navigators, 3 Engineers, 6 Flight Engineering Technicians, 3 Stewards, 1 Cook) in 6 double and 3 quadruple staterooms, 30 passengers in 15 double staterooms.

Note: Crew listed above is sufficient to staff ship with three watches every 24 hours. Flights of less than 12 hours would only require one-third the number of flight crew; however number of stewards would remain the same.

Other: Cargo=11 tons, Fuel=15.5kl

This giant of the air is the size of many star liners. It carries its passengers in luxurious comfort on voyages up to 9,000 kilometers across Tech 5 worlds. Until the introduction of transcontinental airliners at Tech Level 6, this and similar airships are the only means of air transportation between the continents of many worlds.

Page 92, left column, Draft (correction): A throw of 5 (1D) results in the individual being drafted into his homeworld COACC.

Page 93, left column, Survival (correction): If the character’s assignment was Strike, Superiority or Air Defense, he was wounded in action and receives a purple heart.

Page 94: Assignments Table (correction): The Assignments Table does not agree with the Assignment Resolution table. The Assignments Table should read:

<i>Die</i>	<i>Atmosphere/Orbit</i>	<i>Ground</i>
2	Strike	Missiles/Air Defense/Hospital
3	Strike	Missiles/Air Defense/Hospital
4	Superiority	Training
5	Transport/Support	Support/Base//Air Police/Security//Base
6	Training	Support/Base//Air Police/Security//Base
7	Transport/Support	Training
8	Training	Support/Base//Air Police/Security//Base
9	Strike	Training
10	Superiority	Missiles/Air Defense/Hospital
11	Special Assignment	Special Assignment
12	Special Assignment	Special Assignment

KNIGHTFALL (0219, 1990)

The following errata have been identified for **Knightfall**:

Page 11, Patching a Breach (correction): See the errata for the **Players' Manual**, page 90. The task for applying a patch to a breached vacc suit should be:

To apply a patch to breached vacc suits, battle dress or combat armor:
Routine, Vacc Suit or Battle Dress, Dex, 2 sec

Page 20, Active Sensor Pinpoint (correction): The default time for the sensor task is 10 seconds.

HARD TIMES (0221, 1991)

The following errata have been identified for **Hard Times**:

General, Shattered Imperium Maps (correction): On all such maps (p. 11, 13, 15, 17), the locations of Libert and Liasdi were mixed up due to an art paste-up error.

Page 17, Shattered Imperium 1125 Map (correction): The map has Outlands and Wilds switched in the legend. Outlands should be raster-grey and Wilds dotted, not the opposite.

Page 23, Stage 8: Doomed Worlds (correction): Cross off the paragraph starting "This stage is accompanied...), since the example paragraph below indicates that all worlds are affected.

Page 24, Stage 9: Failing Worlds (correction): Delete the paragraph starting "This stage is accompanied...), since the example says that all worlds are affected.

Page 81, Fer-de-Lance class Destroyer (correction): Hull should be *900*/2,250, not 00/2,250.

Page 84, 10. Fuel, Step 2: Cost and Weight of Fuel (addition and correction): The table has been revised as follows:

<i>Type</i>	<i>Mass</i>	<i>Cr</i>	<i>Comments</i>
Solid	0.1	50,000*	Really the engine, not the fuel
Water	1.0	none	
Liquid	0.95	50	Liquid oxygen+kerosene baseline
Hypergolic†	0.75	150	Hydrazine+nitrogen tetroxide baseline
Ionizates	1.5	100	Liquid xenon, etc
Liquid hydrogen	0.07		As per Referee's Manual
Rock	1.0	none	For mass drivers

*Solid rocket fuel is the solid rocket itself. The rocket as listed in the Engine Table ignites and consumes itself completely.

†Hypergolic fuels burn on contact with one another; hypergolic fuels are extremely toxic.

Page 84, Subtable 5a: Engines (addition and correction): The table has been revised as follows:

Subtable 5a. Engines

<i>TL</i>	<i>Type</i>	<i>TT</i>	<i>Mass</i>	<i>Vol</i>	<i>Fuel</i>	<i>FType</i>	<i>PwRqd</i>	<i>PwOP</i>	<i>MCr</i>
3	Solid rocket	20	1.0	1.0	*	Solid	none	none	0.05
4	Resistojet	0.005	1.0	1.0	1.0	Water	0.1	none	0.1
4	Solid rocket	30	1.0	1.0	*	Solid	none	none	0.05
5	Hypergolic liquid rocket	30	1.0	2.0	720	Hypergolic	none	none	0.05
5	Liquid rocket	35	1.0	2.0	545	Liquid	none	none	0.05
5	Solid rocket	35	1.0	1.0	*	Solid	none	none	0.05
6	Hypergolic liquid rocket	35	1.0	2.0	700	Hypergolic	none	none	0.05
6	Liquid rocket	40	1.0	2.0	605	Liquid	none	none	0.05
6	Solid rocket	40	1.0	1.0	*	Solid	none	none	0.05
7	Hypergolic liquid rocket	40	1.0	1.5	685	Hypergolic	none	none	0.05
7	Liquid rocket	45	1.0	1.5	570	Liquid	none	none	0.05
7	Solid rocket	45	1.0	1.0	*	Solid	none	none	0.05
7	LH liquid rocket	40	1.0	2.0	1050	Liquid hydrogen	none	none	0.05
7	Hybrid fuel rocket	40	1.0	1.0	515	Liquid†	none	none	0.05
7	Ion drive	0.05	15	15.0	0.0001	Ionizates	0.5	none	0.20
7	Mass driver	0.1	0.05	3.0‡	3.6	Rock	1.0	none	0.16
7	Nuclear thermal rocket	5	10.0	4.0‡	570	Liquid hydrogen	10.0	none	0.75
8	LH liquid rocket	50	1.0	2.0	1200	Liquid hydrogen	none	none	0.05
8	MPD	0.2	10.0	10‡	0.005	Liquid hydrogen	0.5	none	0.75
8	Nuclear thermal rocket	10	10.0	4.0‡	570	Liquid hydrogen	10.0	none	0.75
8	Exp. fusion rocket	150	10.0	1.0	150	Liquid hydrogen	none	0.5	2.0
8	Mass driver	0.2	0.2	0.2‡	3.6	Rock	1.0	none	0.12
9	Fusion rocket	200	4.0	1.0	205	Liquid hydrogen	none	3.9	0.35

*Solid rocket fuel *is* the solid rocket itself. The rocket as listed in the Engine Table ignites and consumes itself completely. A single kiloliter of it lasts only six seconds. Therefore, it takes 600 kiloliters to last one hour.

†While fuel for a hybrid is actually solid rubber or a similar material, the fuel for hybrids should be treated as liquid, as it has nearly identical characteristics.

‡This is the minimum size these engines may be constructed. Larger models are permitted.

Abbreviations: *TL*: Tech level. *Type*: Type of propulsion system. *TT*: Tons of thrust. *Mass*: Mass in tons. *Vol*: Volume in kiloliters. *Fuel*: Fuel consumption in kiloliters/hour. *FType*: Fuel type (see Fuel, Step 2). *PwRqd*: Power required; if the listing is "none", the engine powers itself and may produce excess power as well. *PwOP*: Power output; if the listing here is "none", the engine does not produce excess energy and probably requires power input to operate. *MCr*: Price in MegaCredits.

Page 86, Offensive systems (correction): Replace the last sentence reading, "And "+" laser and fusion/plasma batteries..." with "Any "+" laser and fusion/plasma batteries."

DIGEST GROUP ERRATA

EARLY ADVENTURES (864, 1988)

The following errata has been identified for *Early Adventures*:

Page 35, The Corridor Sector, Library Data of the Sector (omission): In compiling THE EARLY ADVENTURES, the following entry was dropped from Adventure 3.

Shurgi Main: The Shurgi Main is a branch of the Vland Main, and was settled during the First Imperium. The Corridor sector was first entered at the world Sharkagu (Corridor 3235) by ships of the Sharurshid Merchant Company out of Sakin (Vland 0135). Sharkagu, only one jump away, strongly resembled Sakin and the colony there has maintained close relations with the mother planet throughout its history; indeed, it never requested independence throughout the Long Night, and remains a Sakin colony to this day.

At Cafed (Corridor 3135), a low-tech human population was discovered. The Vilani efforts to integrate the Cafed humans into their Grand Imperium progressed slowly. The world relapsed into barbarism at the onset of the Long Night. After centuries of contact with the Third Imperium, Cafed has only now started to re-embrace technology.

Iqudi (Corridor 2836) discarded most technology during the Long Night. Its climate is hospitable to humans, and the inhabitants prefer an essentially pastoral existence. Certain native animals have been domesticated for food and wool. The populace has shown very little inclination to technology advancement since the original contact by the Third Imperium in the first century. Interstellar merchants occasionally visit the world to trade with the locals.

Palama (Corridor 3240) was only recently colonized because its resources were not detected until the Tech Level 15 density survey. Its dense, tainted atmosphere made it unattractive to ordinary colonists.

The Shurgi Main is commercially and psychologically part of the central Imperium.

101 VEHICLES (871, 1988)

The following errata has been identified for *101 Vehicles*:

Page 3, 1. TL 6 Penetrator Armored Car (correction): The following corrections are from Jake Collins:

CraftID: Imperial *Penetrator* Armored Car, TL 6, Cr14,000

Hull: 1/3, Disp=1(+10% turret), Config=4USL, Armor=6B, Unloaded=5 tons, Loaded=11.1 tons

Power: 1/2, Imp Int Comb=0.40Mw, Dur=8/25

Loco: 1/2, Wheels=6, P/W=35, Road=100kph, Off-road=20kph

Commo: Radio=VDist (50km)

Sensors: Headlightsx2

Off/Def Hardpoints=1

	<i>Ammo</i>	<i>Rds</i>	<i>Pen/ Attn</i>	<i>Dmg</i>	<i>Max Range</i>	<i>Auto Tgts</i>	<i>Dmg Spc</i>	<i>Sig</i>	<i>ROF</i>
HMG x2	—	200	6/3	3	VLong(1.5)	3	—	H	80

Control: Enhanced Mech

Accomm: Crew=2 (driver, gunner), Seats=Adequatx2

Other: Fuel=5kl, Cargo=1.0kl, ObjSize=Small, EmLevel=Moderate

As military vehicles go, the *Penetrator* class armored car is cheap, which makes it very popular with national and planetary armies on very low tech worlds. Small mercenary forces find it attractive for swift raids and reconnaissance in more urban territory. Its low off-road speed renders it less than ideal for back-country fighting.

Page 3, 2. TL 6 Divine Retribution Light Battle Tank (correction): The following corrections are from Jake Collins:

CraftID: Imperial *Divine Retribution* Tank, TL 6, Cr79,906
Hull: 2/5, Disp=2(+10% turret), Config=4USL, Armor=12B, Unloaded=25 tons, Loaded=27.7 tons
Power: 1/2, Imp Int Comb=1.2Mw, Dur=1/4
Loco: 1/2, Tracks, P/W=43, Road=97kph, Off-road=58kph
Commo: Radio=Rgnl (500km)
Sensors: Radar=None, Act IRx4, Pass IRx4, Headlightsx2, ActObjScan=None, PassEngScan=None

Off	Ammo	Rds	Pen/ Attn	Dmg	Max Range	Auto Tgts	Dmg Spc	Sig	ROF
6cm HiV	HE	25	9	10	Dist(10)	—	—	H	14
	HEAP	25	10	8	Dist(10)	—	—	H	14
	KEAPER	25	22	9	Dist(10)	—	—	H	14
	Flech.	25	—	2	Dist(10)	—	150	H	14
HMGx2	—	200	6/3	3	VLong(1.5)	3	—	H	80

Def: Smoke Dischargerx6

Control: Enhanced Mechx6

Accomm: Crew=4 (Cmdr, driver, gunnersx2), Seats=Adequatex4, Env=Basic env, basic Is, ext Is

Other: Fuel=2.5kl, Cargo=0.2kl, ObjSize=Small, EmLevel=Moderate

The Divine Retribution class light battle tank is typical of the tanks found in many lower-tech armies throughout the Spinward Marches. Its class name comes from its original homeworld, a religious dictatorship. The Divine Retribution is particularly prized for its see-in-the-dark capabilities.

Page 4, 3. TL 6 D'wor Tracked Tank (correction): The following corrections are from Jake Collins:

CraftID: Imperial *D'wor* Tracked Tank, TL 6, Cr95,000
Hull: 2/5, Disp=2(+10% turret), Config=4USL, Armor=26B, Unloaded=37.8 tons, Loaded=42.6 tons
Power: 1/2, Imp Int Comb=0.52 Mw, Dur=3 hrs
Loco: 1/2, Tracks, P/W=12, Road=45 kph, Off-road=14kph
Commo: Radio=Cont (5,000km)
Sensors: Headlightsx2
Off: Hardpoints=1, WeaponStabilize=20kph

	Ammo	Rds	Pen/ Attn	Dmg	Max Range	Auto Tgts	Dmg Spc	Sig	ROF
8cm HiV	HE	100	14	12	Dist(16)	—	20	H	10
LMGx3	—	1000	3/3	3	VLong(1.0)	2	—	H	60

Def: Smoke Dischargerx6

Control: Enhanced Mechx13

Accomm: Crew=5 (driver, gunnersx2, loader, cmdr/gunner), Seats=Crampedx5, Env=Basic env

Other: Fuel=0.1kl, Cargo=4.6kl, ObjSize=Small, EmLevel=Moderate

The *D'wor* class tracked tank is a popular fighting vehicle on very low tech worlds. The combination of armor, mounted weapons, and speed make it a durable and feared weapon on the battlefield.

Page 10, 15. TL 11 Sword Worlds Gram Grav Tank (correction): This design is on the inside front cover. The following corrections are from Jake Collins:

CraftID: Sword Worlds *Gram Grav* Tank, TL 11, MCr13.177
Hull: 5/13, Disp=5 (+10% turret), Config=4USL, Armor=55E, Unloaded=209.9 tons, Loaded=214.1 tons
Power: 1/2, Fusion=18Mw, Duration=31/94
Loco: 2/4, LP Hvy Grav, Thrust=400 tons, NOE=150kph, MaxAccel=0.8G, Cruise=225kph, Top=300kph
Commo: Radio=Cont (5,000km)
Sensors: EMMask, Headlightsx2, laser sensor

Off	Ammo	Rds	Pen/ Attn	Dmg	Max Range	Auto Tgts	Dmg Spc	Sig	ROF
Plasma PA-11	—	—	44/5	20	VDist(5.1)	2	15	H	40
3cm AutoCan	HE	500	2	6	VLong(3.5)	4	3	M	200
	HEAP	500	5	4	VLong(3.5)	4	—	M	200
	KEAP	500	4	4	VLong(3.5)	4	—	M	200

Def: Prismatic Aerosolx8, TL 10 Stabilization, TL 11 Point Defense

Control: Computer=0/bisx2, Dyn Linkx4, HUDx4

Accomm: Crew=3 (driver, gunner, cmdr), Seats=Roomyx4, Env=basic env, basic Is, ext Is, inertial comp

Other: Fuel=13.5kl, Cargo=3.2kl, ObjSize=Average, EmLevel=Faint

This Sword Worlds *Gram* class grav tank is heavy on armor and power, very light on sensors. It is used in massive battle lines where it can rely on data from forward observers and deployed sensors. This is typical of the brute force approach used by Sword Worlds in combat.

Page 14, 24. TL 14 Imperial *Invader* Light Grav Tank (correction): This design is on the inside front cover. The following corrections are from Jake Collins:

CraftID: *Invader* Light Grav Tank, TL 14, MCr53.6

Hull: 10/24, Disp=10, Config=1AF, Armor=50G, Unloaded=158.6 tons, Loaded=162.8 tons

Power: 1/2, Fusion=61.2Mw, Duration=8/25

Loco: 4/8, LP Hvy Grav, Thrust=900 tons, NOE=180kph, MaxAccel=4.5G, Cruise=2,730kph, Top=3,640kph

Commo: Radio=System(1,000 AU), Maser=System(1,000 AU)

Sensors: EMMask, ActEMS=Cont (5,000km), Neutrino=10kw, PassEMS=Cont (5,000km), Headlightsx2, Densitometer=HiPen/250m, PassAudio=Dist (5km), ActAudio=Dist (5km), PassMag=VDist (50km), ActObjScan=Diff, ActObjPin=Diff, PassObjScan=Rout, PassObjPin=Rout, PassEngScan=Diff, PassEngPin=Rout

Off: Hardpoints=1

	Ammo	Pen/ Attn	Dmg	Max Range	Auto Tgts	Drng Spc	Sig	ROF
Fusion FY-14	—	71/5	30	VDist(21)	2	45	H	40

Def: Sandcaster, PGMP-14

Control: Computer=3/fibx4, Holo Linkx4, HUDx4

Accomm: Crew=4 (driver, gunnerx2, cmdr), Seats=Roomyx4, Env=basic env, basic ls, ext ls, grav plates, inertial comp

Other: Fuel=10kl, Cargo=3.5kl, ObjSize=Average, EmLevel=Faint

The *Invader* class grav tank, built by the Military Technologies Group of Ling Standard Products, is popular on many TL 14 worlds of the Imperium.

Page 15, 27. TL 14 *Qiknavra* Grav Tank (correction): The correctly stated *Qiknavra* tank can be found in the *Rebellion Sourcebook* errata (page 91).

Page 17, 32. TL 14 Imperial *Trepida* Grav Tank (correction): This design is on the inside front cover. The correctly stated *Trepida* grav tank can be found in the *Rebellion Sourcebook* errata (page 86).

Page 17, 33. TL 14 *Astrin* Grav APC (correction): The correctly stated *Astrin* grav APC can be found in the *Rebellion Sourcebook* errata (page 87)

Page 19, 36. TL 15 *Empress* Grav APC (correction): The following corrections are from Jake Collins:

CraftID: *Empress* Grav APC, TL 15, MCr9.982

Hull: 12/30, Disp=13, Config=4SL, Armor=60G, Unloaded=291.3 tons, Loaded=318.6 tons

Power: 2/4, Fusion=135Mw, Duration=28/84

Loco: 1/2, Std Grav, Thrust=600 tons, NOE=190kph, MaxAccel=0.8G, Cruise=720kph, Top=960kph

Commo: Radio=Cont(5,000km)x2, Meson=Rgnl(500km)

Sensors: EMMask, ActEMS=Dist (50km), PassEMS=VDist (50km), Headlightsx2, ActObjScan=Diff, ActObjPin=Diff, PassEngScan=Form

Off: Hardpoints=1

	Ammo	Pen/ Attn	Dmg	Max Range	Auto Tgts	Drng Spc	Sig	ROF
Fusion RFY-15	0	71/5	30	VDist(21)	3	45	H	80

Def: Smokex5, Prismatic Aerosolx5

Control: Computer=0/bisx2, HoloDynLinkx2, HUD

Accomm: Crew=2 (operator/gunner, cmdr), Seats=Adequatex10, Env=basic env, basic ls, ext ls, grav plates, inertial comp

Other: Fuel=68kl, Cargo=27kl, ObjSize=Average, EmLevel=Faint

The *Empress* class grav armored personnel carrier is a popular model with the Imperial Marines. The craft is fast, heavily armored, and mounts an RPY-15 fusion gun—making it an ideal *personnel* carrier for military campaigns.

Page 34, 69. TL 10 *Sirvaan* Air/Raft (correction): This design is on the inside back cover. The following corrections are from Jake Collins:

CraftID: LSP *Sirvaan* Air/Raft, TL 10, MCr0.368

Hull: 1/2, Disp=0.75, Config=4USL, Armor=4E, Unloaded=1.3 tons, Loaded=1.4 tons

Power: 1/2, Fuel Cellx3=0.27Mw, Duration=5/16

Loco: 1/2, LP Hvy Grav, Thrust=1.7 tons, NOE=140kph, MaxAccel=0.15G, Cruise=180kph, Top=240kph

Commo: Radio=Cont(5,000km)

Sensors: PassEMS=Dist (5km), Headlightsx2, ActObjScan=Form

Off/Def: Hardpoints=1

Control: Computer=0/bisx2, Dyn Link

Accomm: Crew=1, Seats=Crampedx4

Other: Fuel=0.15kl, Cargo=0.14kl, ObjSize=Small, EmLevel=Moderate

The *Sirvaan* air/raft, manufactured by the Imperial megacorporation Ling Standard Product, can be found in all areas of the Imperium. The *Sirvaan* includes a tarp to protect its occupants from the elements during bad weather.

Page 47, 99. TL 15 Meteor Speeder (correction): This design is on the inside back cover. The following corrections are from Jake Collins:

CraftID: Meteor Speeder, TL 15, MCr0.893

Hull: 5/14, Disp=6, Config=1AF, Armor=4G, Unloaded=8.647 tons, Loaded=20.707 tons

Power: 1/2, Fusion=9Mw, Duration=179/537

Loco: 1/2, StdGrav, Thrust=52 tons, MaxAccel=1.15G,
NOE=190kph, Cruise=1073kph, Top=1431kph

Commo: Radio=System(1,000 AU)

Sensors: PassEMS=VDist (50km), ActEMS=VDist (50km), ActObjScan=Diff, ActObjPin=Diff,
PasEngScan=Form

Off/Def: HardPoints=1

Control: Computer=0x2, Holo Link, HUD

Accomm: Crew=1 (Operator=1), Seats=Roomyx2, Env=Basic env, basic ls, inertial comp

Other: Fuel=58kl, Cargo=8kl, ObjSize=Small, EmLevel=Moderate

The Meteor speeder is a streamlined grav-powered craft intended for high-speed transport between points on a world surface.

STARSHIP OPERATOR'S MANUAL VOL 1 (872, 1988)

The following errata has been identified for *Starship Operator's Manual V1*:

Page 3, Credits, Additional Design (omission): Howard Leidner and Rob Prior should be added to this section.

Page 64, Step 4, Hours in Jump Space (clarification and addition): The formula given for normal jumpspace exit is: 124 hrs + (2Dx6 hrs), yielding a result of from 136 - 196 hours (5.7 to 8.2 days). However, this does not account for military operations when vessels know they have to arrive in unison. Such vessels spend significantly longer at the start computing and sharing jump vector computations. This leads to a much more accurate jump exit at the other end, with the error dropping significantly

If double the jump preparation time is spent with all the affected ships in computer link via communication lines, use the following formula instead: 167 hrs + (2Dx0.1 hr), yielding a result of from 167.2 - 168.2 hours. Most ships will arrive within minutes of each other, with the worst spread being up to an hour apart. Constant communication during the jump vector generate is essential for this to work, and double the normal jump vector generation time must be observed. But when getting there "on a dime" timewise is essential, then this technique is the key. Most civilian vessels don't bother.

WORLD BUILDER'S HANDBOOK (875, 1989)

The following errata has been identified for *World Builder's Handbook*:

Page 52, Star System Orbital Zones (clarification): The text notes: "As an aid to you, the Star System Orbital charts from page 27 of the *MegaTraveller Referee's Manual* have been reprinted at the front of the step charts section." Related errata appears below.

Page 59, Steps 5-7, Orbit Zones for Star Size III, IV, and V (correction): Remove the entries from all three tables for star types B0 and B5.

Page 59, Step 8, Orbit Zones for Star Size VI (correction): Since existing errata has removed Star Size VI from the Primary and Companion Star tables, this table can also be removed.

Page 59, Step 9, Orbit Zones for Star Size D (omission): Size D stars have no decimal classification. There are a large number of published sectors that do have decimal classifications assigned to size D stars. There is no need to delete these, only to remember that the decimal classifications are irrelevant: a M1D or a M8D star are both "DM" on the Orbit Zone table.

Page 63, Seismic Stress Factor (clarification): In the formulas for the values of M and S, and in the example following, some printings of the "÷" symbol appear as "+" symbols. These should be division signs, not addition signs.

Page 68, Step 11, Temperature Worksheet, column 12 (correction): Column 12 is labeled "Col 11x12"; it should read "Col 10x11".

Page 83, 4a Computer/Robotics TL Limits (correction): Lower limit: Upper Limit - 3 (drop fractions).

Page 85, 5a Communications TL Limits (correction): Lower limit: Upper Limit - 3 (drop fractions).

An index for *World Builder's Handbook* was published in *Travellers' Digest #17*.

VILANI & VARGR (878, 1990)

The following errata has been identified for *Vilani & Vargr*:

Credits (correction): The art credits for **Vilani & Vargr** neglected to mention Robert Parker, who executed the world maps of Vland and Lair on the inside covers. Also, Mike Jackson, Clay Bush, Philip Athans, Mike Mikesh, and David Riddell should all have design credits.

Page 36, TL 12 Gudukraa G-Carrier (correction): The following corrections are from Jake Collins:

CraftID: Vilani *Gudukraa* G-Carrier, TL 12, *MCr1.923*

Hull: 6/14, Disp=6, Config=6SL, Armor=4E, *Unloaded=33.549 tons, Loaded=49.8434 tons*

Power: 1/2, *Fusion=18Mw*, Duration=6/18

Loco: 1/2, StdGrav, *Thrust=80 tons*, MaxAccel=0.6G, NOE=160kph, CruiseAtm=540kph, TopAtm=720kph

Commo: Radio=Cont(5,000km)

Sensors: PassEMS=VDist (50km), ActEMS=VDist (50km), Headlightsx5, ActObjScan=Diff, ActObjPin=Diff, PasEngScan=Form

Off/Def: HardPoints=1

Control: Computer=0/bisx2, Dyna Linkx2, *HUD*

Accomm: Crew=1 (Operator=1), Seats=Roomyx12, Env=Basic env, basic ls, ext ls, grav plates, inertial comp

Other: Fuel=4.2kl, *Cargo=16kl*, ObjSize=Small, EmLevel=Moderate

The *Gudukraa* G-Carrier is designed to be a reasonably priced civilian vehicle for transporting people and cargo. Over half the *Gudukraa* hull surface area is clear plasteel windows, providing for an unexcelled view of the surroundings during a flight.

Page 48, Vargr Extents map 1120 (correction): There is an error in the dotmap for Tuglikki sector; there is no world in hex 1937 (which is listed in the library data for Deneb sector in *Travellers' Digest* 19, p. 25). Six systems in Uerrvikh subsector should be shifted one parsec to rimward.

Page 51, Uthith Fleet (correction): The location of Uthith should be Gvurrdon 2738. The stated location, Gvurrdon 2703; makes no sense given the role of the Ekhlle Ksafi in the Fifth Frontier War.

SOLOMANI & ASLAN (881, 1991)

The following errata has been identified for *Solomani & Aslan*:

Credits (correction): Left out of the credits was Deb Ziegler, who did some last minute revisions to the Aslan History section.

Illustrations (corrections): These are mostly illustration replacements. The pictures of the Aslan Courier (page 93) and the Aslan Escort (page 94) were swapped. The illustrations of the Grand Conclave (page 92) and a pair of Aslan storytelling on an interstellar journey (page 64) were switched. And lastly, the illustrations of Solomani Chairman Desmond Trinoch (shown on page 33) should trade places with the Solomani investigative journalist (page 12).

Illustrations (clarifications): The two women on page 9 are Wuans. Page 84 shows an Aslan sitting before a very ornate Shrine of Heroes. Finally, the man shown in the Dark Nebula Library Data (page 99) is Kimsone Earle, while the aliens shown on the next page are the Ormine.